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1918

THE NATION'S BUSINESS



You Millions Safe at Home"

From a Man in Uniform to Those of Us Who Are Not

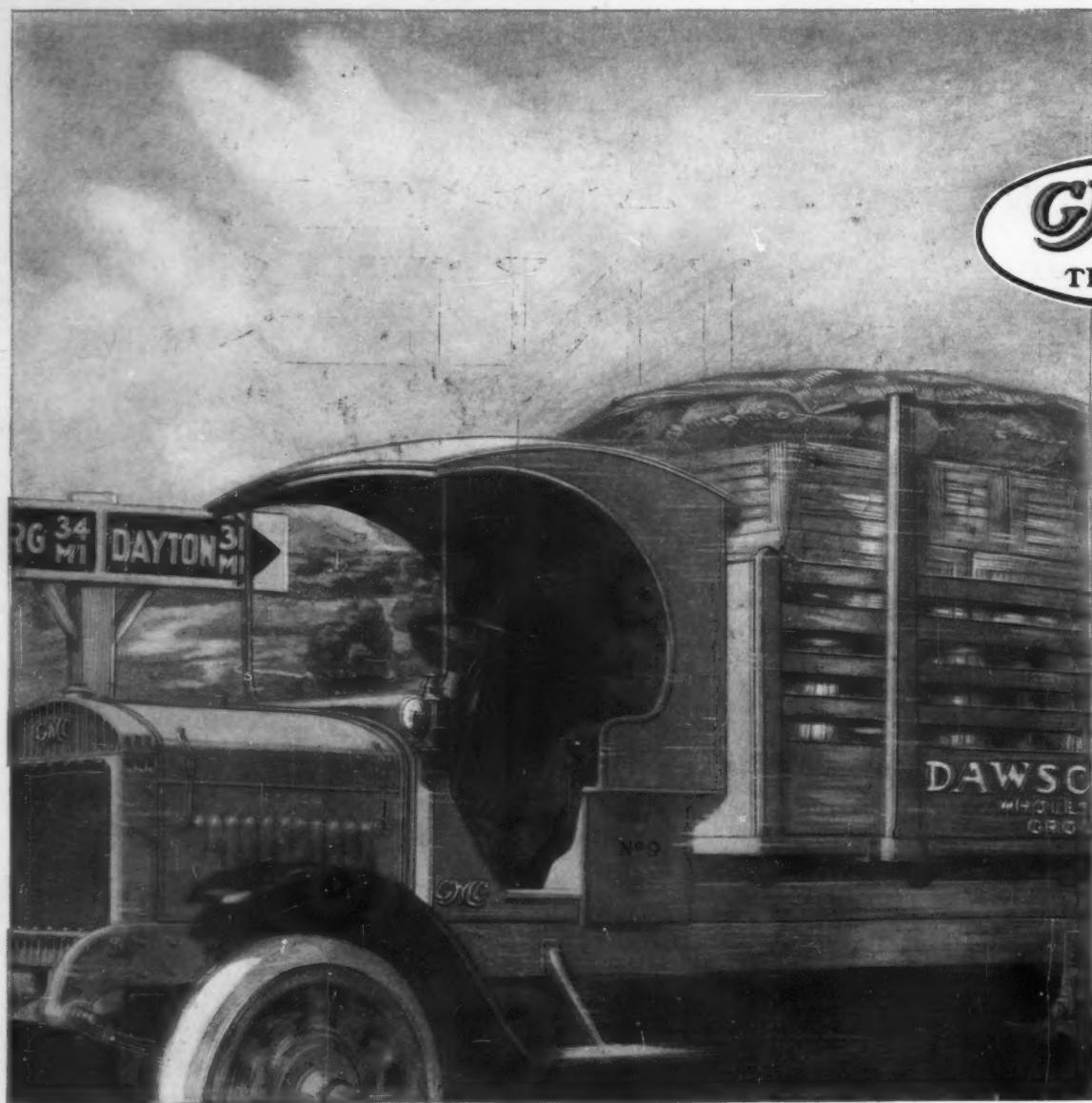
THENE say, who have come back from Over There, that at night the troubled earth between the lines is carpeted with pain. They say that Death rides whistling in every wind, and that the very mists are charged with torment. They say that of all things spent and squandered there young human life is held least dear.

IT is not the pleasantest prospect for those of us who yet can feel upon our lips the pressure of our mother's good-bye kiss. But, please God, our love of life is not so prized as love of right. In this renaissance of our country's valor, we who will edge the wedge of her assault make calm acceptance of its hazards. For us, the steel swept trench, the stiffening cold—weariness, hardship, worse. For you, for whom we go, you millions safe at home—what for you?

WE shall need clothes for our bodies and weapons for our hands.

We shall need terribly and without failure supplies and equipment in a stream that is constant and never-ending. From you, who are our resource and reliance, who are the heart and hope of that humanity for which we smite and strive, must come these things.

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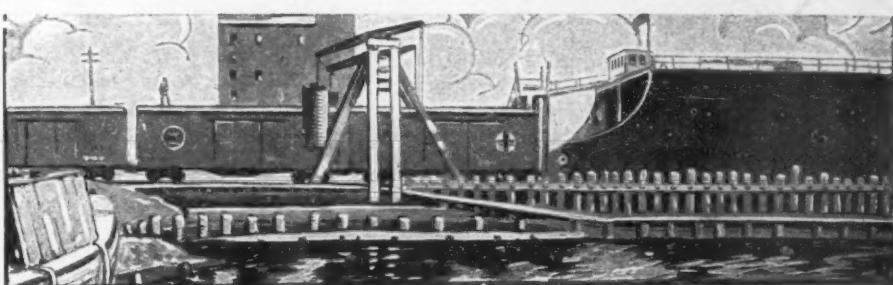
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Send for "Suggestions to Exporters," a book with a message to Managers of the Nation's Business, the treatise which aids develop Foreign Trade.



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The day's work is done. Are these men—your employees—going to homes that are real homes—the kind that keep men satisfied and willing to stay in your employ?

This is one of the most acute problems of the labor situation—a condition brought about by the shifting of labor necessary to meet war-time operations. Proper housing must be provided to obtain and keep labor.

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The CONCRETE ROADS of Snohomish County, Wash., were ready for immediate hauling, by motor truck, of millions of feet of timber for ships and airplanes.

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porting and expediting war preparedness. If concrete roads systems were available everywhere, the Nation's vast war production as well as its commerce would be unhampered by shortages of fuel and raw materials. Its full military and industrial power could be mobilized.

Concrete highways are as necessary in peace as in war. They are becoming the very arteries of national life. Systems of them should be built. Delay only adds to the enormous burden which the public bears in maintaining impermanent highways under heavy motor traffic.

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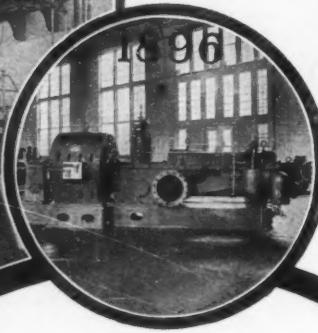
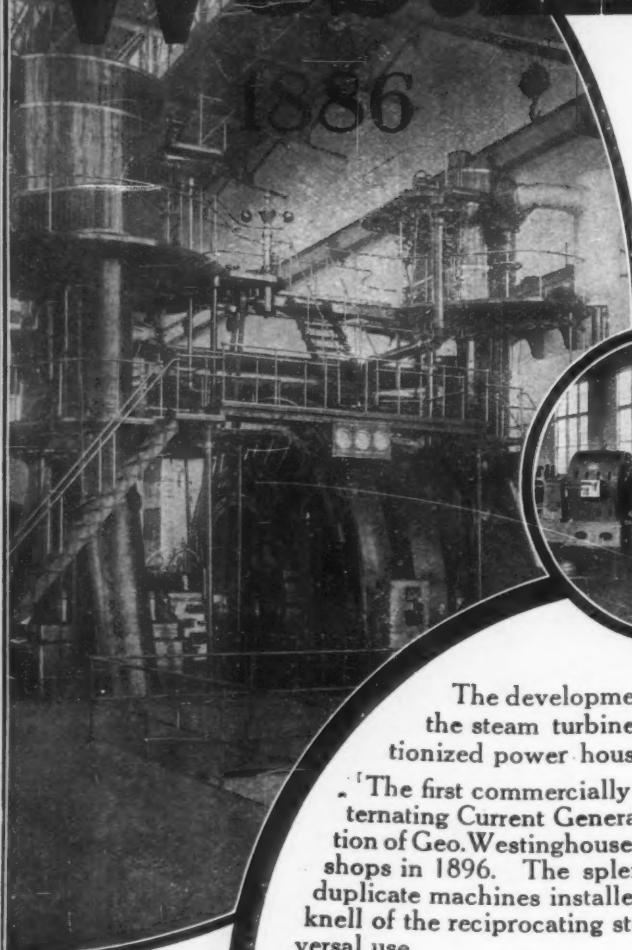
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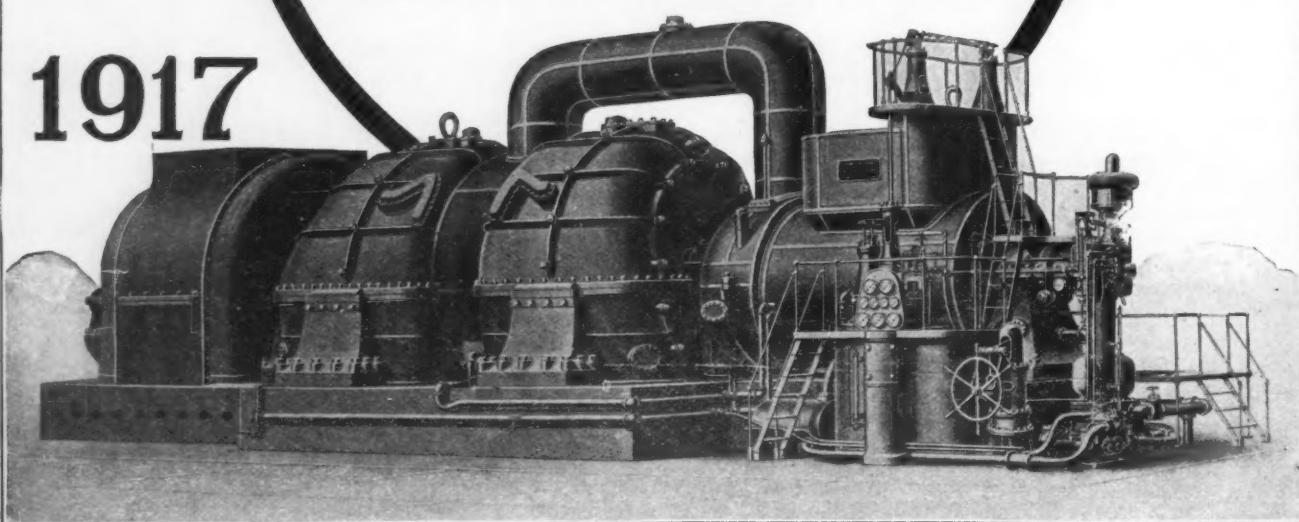
The first commercially successful turbine-driven Alternating Current Generator developed under the direction of Geo. Westinghouse was tested in our East Pittsburgh shops in 1896. The splendid operation of this, and two duplicate machines installed a year later, sounded the death knell of the reciprocating steam engine—then in almost universal use.

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WESTINGHOUSE ELECTRIC & MANUFACTURING CO., East Pittsburgh, Pa.

1917



IN THIS NUMBER

YOU MILLIONS SAFE AT HOME.....	The Cover
The challenge in the Citizen Soldier's letter was posted by the Winchester Repeating Arms Company on a large placard in its shops and work-rooms. Employees made its message known to the illiterate alien workmen with effective results.	
THE WAY TO LOSE THE WAR....By Edward A. Filene	Page 7
The reader who sees the big need of ships and who wants to help build them but doesn't know how, will find the answer here. Mr. Filene has spent six months in Washington, making frequent trips to ship-building centers in finding the solution.	
WAR PLANS FOR PEACE PLANTS....By George N. Peek.....	Page 10
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"What food stuffs will Germany get out of Russia," we asked Vernon Kellogg the other day. His experience behind the German lines with the Belgian Relief, where he specialized in Germans and food, made his conclusions authoritative and the entertaining fashion in which he presented them led us to prevail upon him to tell the story for our readers in this number.	
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Superlatives are odious and understatement a virtue, but nevertheless we are going to risk our reputation on the assertion that the best thing in this number is the "close-up" of the legislative attitude of the government towards business during the current month. Here in this regular department the busy reader will find in concise form what's what as to the railroad bill; as to the War Finance Corporation; as to the licensing of capital issues; as to keeping our dollar at par in foreign countries; as to housing war workers; as to the control of profits; as to domestic coal trade and mercantile marine in Great Britain, together with the regulation of profits by the British Ministry of Munitions; as to future bond issues; new taxation; draft exemption for industries; control of supplies and other pending legislation.	
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THE BUSINESS MAN'S WAR COUNCIL....By T. R. Smith.....	Page 20
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The Government just now is directing its attention to the handling of freight at terminals, suspecting that here is one of the loose screws in our transportation system. Three months ago we asked Mr. Myers of the Society for Electrical Development, whom we consider best qualified for the work, to investigate the situation. His conclusions herewith are illuminating and will be of real value to any shipper.	
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MERLE THORPE
Editor



THE NATION'S BUSINESS
A Service for Business Men

Published Monthly by the Chamber of Commerce of the United States

As the official magazine of the National Chamber, this publication carries authoritative notices and articles in regard to the activities of the Chamber, its Board of Directors and Committees. But in all other respects, the Chamber is not responsible for the contents of the articles or for the opinions to which expression is given.

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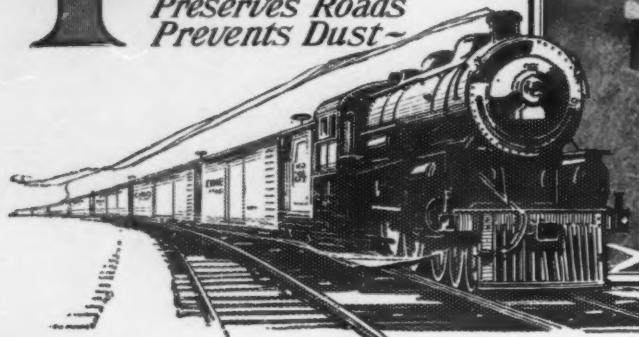
F. S. TISDALE
Managing Editor



Entered as second class matter February 18, 1913, at the Postoffice at Washington, D. C., under Act of March 3, 1879.

Tarvia

Preserves Roads
Prevents Dust-



© Central News

The Roads Must Help the Railroads

PRECIOUS shipping is waiting in the harbor because cargoes are clogged on the railroads. Factories are laying off their labor and closing because they cannot get raw materials through the railroad embargoes. The whole internal commerce of the East is in a snarl, and it will be so intermittently till the end of the war and after.

Parallel with every railroad run the public highways. They are *not clogged* with traffic.

But they *are clogged* with mud or with neglect in various sections of the through-routes and the great swarm of motor-trucks traverse them slowly and with difficulty.

Clear these roads, the nation needs them!

Make your town, your county, keep up its part of the great arteries. Don't let your locality be the weak link in the chain where an impassable mile puts the whole interurban route out of commission.

It is no time to be building roads for mere beauty or comfort.

It's no time to tolerate poor roads that might be easing the over-load of the railways.

Such roads call for labor and materials that are needed elsewhere.

Build and treat your roads with Tarvia.

In England and France that is just what they are doing: making their roads last longer by tarviating them on a greater scale than ever. They figure that it saves labor which is scarce and public money which is scarcer.

The Nation's plea to our local governments to refrain from public works that can wait till the end of the war does not apply to roads.

Roads were never so vital as right now. They will help us win the war.

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Special Service Department

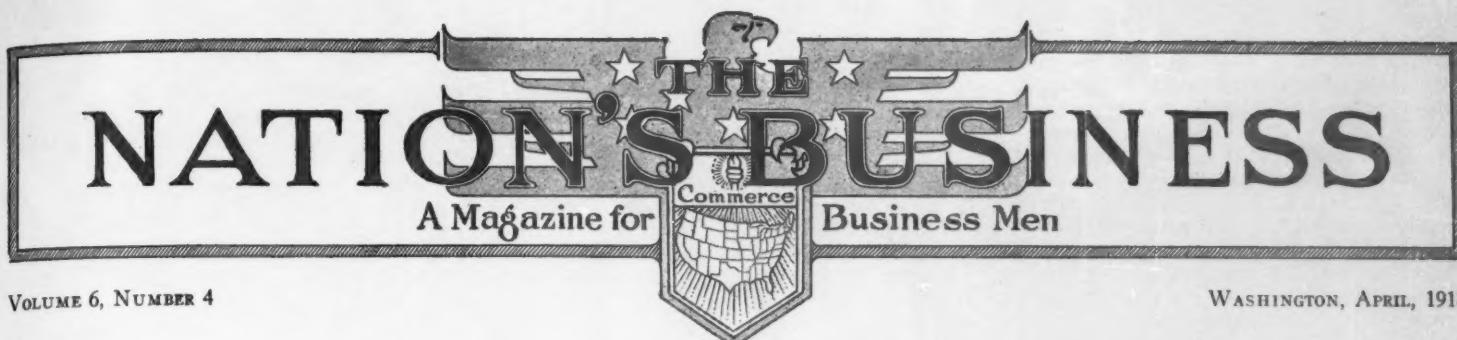
In order to bring the facts before taxpayers as well as road authorities, The Barrett Company has organized a Special Service Department which keeps up to the minute on all road problems. If you will write to the nearest office regarding road conditions or problems in your vicinity, the matter will have the prompt attention of experienced engineers. This service is free for the asking.

If you want *better roads and lower taxes*, this Department can greatly assist you.

PHOTOS ABOVE ARE

Top—Troop movement over Tarvia-treated Government Post-Road, leading from Fort Sam Houston, Texas.
Middle—Military truck-trains need Tarvia roads for efficiency.
Bottom—Tarvia-built road, N. Main Street Providence, R. I.





VOLUME 6, NUMBER 4

WASHINGTON, APRIL, 1918

THE WAY TO LOSE THE WAR

Failure To Build Ships Is a Sure Prescription—Our Business Executives Hold a Power that Can Prevent Its Fulfillment

By EDWARD A. FILENF

Chairman, War Shipping Committee of the Chamber of Commerce of the United States

*If there is one chance in 100 that we shall be short of ships in the next six months then—
All our country's resources in men;
All our country's resources in material;
All of our country's resources in aiding—
Must go first of all to helping to turn out more ships in the next six months.*

Because ships are the bridge over which every soldier we train, every gun we make, every bit of food we save, every supply needed to win the war must go before they can be used.

If the bridge is broken, if there are so few ships that there are gaps in the bridge, then we cannot win.

IT is imperative that the business men of the country shall react at once to these facts; and there can be no question of their willingness to do so. The most insistent query that comes to Washington from every side is "How can I help? What can I do? Show me the way."

An answer—clear, positive, simple, definite—has now been made to that question. It has recently been worked out, after months of consideration; and it comes from business men to business men. It places the whole problem on a basis so fundamentally practicable that he who runs may read; and if the business men of any community hereafter fail to contribute all that it is in them to contribute toward the winning of this war, it will be their own fault.

The answer comes from the War Shipping Committee of the Chamber of Commerce of the United States. It calls on every business

organization in the country—particularly the organizations in shipbuilding communities—to organize for the carrying out of a well-defined programme for local action, allowing for such local adaptations of the idea as may be necessary. Its great merit is that it makes the individual in every community answerable to the leaders of that community for the contribution he makes. It makes it possible, by intensive work, for the local business organization to place a hand on the shoulder of John Smith, look him in the eye, and say, "This community expects you to do thus and so in this matter. That will be your quota."

First let me show the application of the programme where its uses are most vital, that is in shipbuilding communities. We can consider the non-shipbuilding community later.

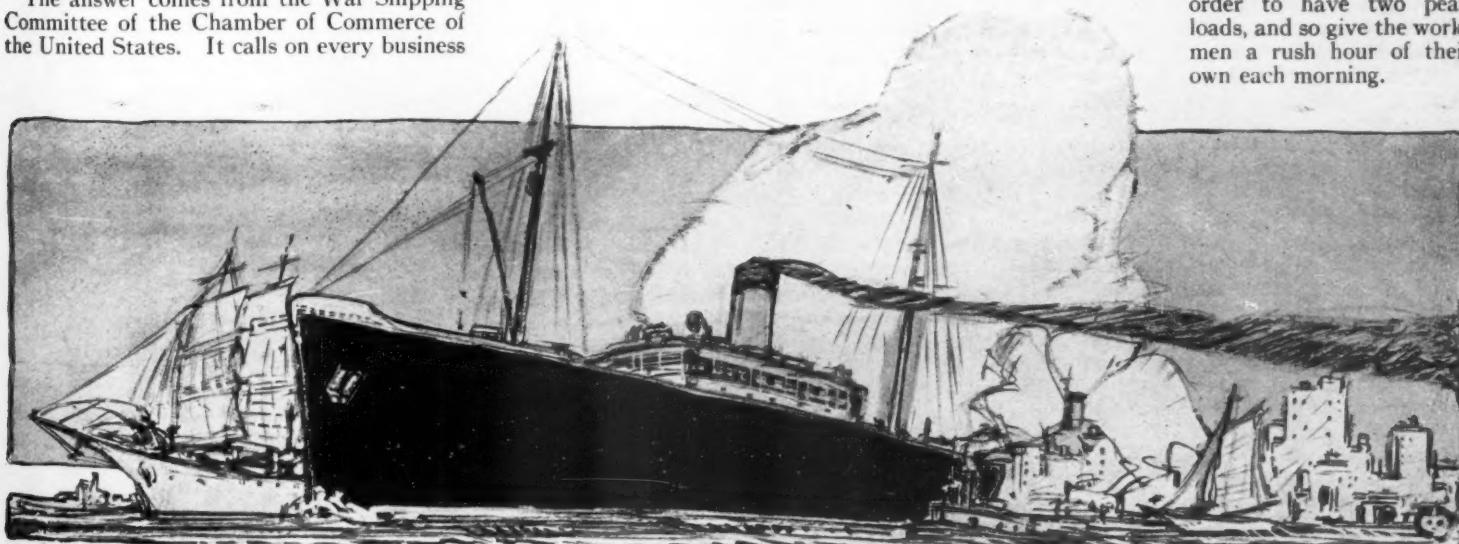
It amounts to saying to the man in the shipbuilding community, "If you want to help in this moment of national peril, see to it, first of all, that your local business organization accepts the fact that it is just as much responsible for getting out ships in this crisis as the shipbuilders are; and that your local business organization, therefore, uses its power first of all to help shipbuilders."

This means sitting in with the shipbuilders once a week, and actually going over their

problems, and finding out just how they can help. It is not at all the same thing as making a general blanket offer to help, and then sitting back to await the call. That has been tried, and it has failed. The need is for active and continued counsel through which the business men of the community seek, without officious interference, to relieve the shipbuilder of as many of his non-technical problems as he needs to be relieved of. For example, the traffic expert of a business association can be of great assistance to shipbuilders in getting materials for their work if he be free to give such help and makes it his first duty to do so.

Second, let the man who would help see that his local organization, having put its hand to the plough, sets itself to solve the questions of transportation involved in shipbuilding work. Such questions relate on the one hand to the bringing in of materials—which is a matter for the local traffic expert; and on the other hand to carrying workmen to and from their work.

This last is of capital importance; for the car lines in many ship communities are unable to meet the sudden extra load which the influx of thousands of workers has put upon them. So enormous is the demand that in some such communities the business organizations have had to solve the problem by changing the local business schedule by opening stores and offices a half hour late in order to have two peak loads, and so give the workmen a rush hour of their own each morning.



It may even mean that the local business organization must requisition the services of owners of private automobiles to carry men to and from their work. Think of the opportunity there for the shipbuilding community whose business men are organized for action. Think of what it would mean if this were regularly done; and if the workmen of the plant saw daily a string of hundreds of automobiles, from flivvers to the finest made, waiting to carry them, at considerable sacrifice and inconvenience, so that they might do their work for the nation to the best advantage. Can one imagine such workmen striking, or delaying ships, or refusing to adjust their differences with their employers through established boards of arbitration? No workmen could ignore or discount the meaning of such recognition.

Wasted Ship Minutes

AS it is, workmen in many yards have to wait a very long time for a car. The loss of time, and the lengthening of their day, puts them under such a strain that they can't do their best work. The organized business forces of the community are the only agency that can quickly and effectively end such a condition as that.

Again—workmen who are improperly housed cannot do their best work. Every housing facility of the community, therefore, belongs first to ship workers, just as they would belong first to our soldiers if they were billeted on a town. A ship worker does not wear the uniform, but he is just as important and essential and entitled to as much recognition as if he did.

This housing problem is one of the most serious we have to face. Cantonments and houses will be built. The government has just appropriated \$50,000,000 for that purpose. But they will not be ready in less than six months; and we cannot wait. Here again the organized business men of the community must solve the local problem; and they must see to it that the citizens of their community, regardless of questions of personal convenience, shall take these workmen into their private homes till other accommodations are ready. Care could be taken of course to make careful choice of the right man for the right home. Indiscriminate distribution of men through all classes of homes would be unnecessary. But the fact remains that the thing must be done, whether or no and done at once.

Next comes a point on which I have already touched; and that is that every shipbuilding community should adopt a definite policy of recognition in its relations with the ship workers. The contribution of private automobiles is one phase of that. Another may be found in a plan which is now being worked on by the War Shipping Committee, providing that ship workers, wearing the official ship workers badge, be admitted to moving picture shows and other places of amusement at a reduced price of admission. It is not merely a question of difference in price. It is the clear implication that goes with it that the community honors and appreciates the ship workers as it honors and appreciates the soldier. And of course there are other ways in which such recognition can be given.

The Chamber of Commerce of the United States, for instance, has issued a special bronze badge for ship workers, which has been officially approved by the Shipping Board. These badges are a mark of honor; and they are issued under rigidly prescribed conditions. If a man leaves the yards, he surrenders his badge. If he remains in the work till the end, it is his for all time. The idea of the badge has taken strongly. More than 123,000

badges have already been issued, and the call for them continues. It is striking evidence of how the men engaged in this trying task react to recognition. A policeman or a fireman, for example, can, by virtue of his badge, mount any street car without paying a fare. It is a recognition given for clearly defined reasons. His badge carries with it a certain meaning and a certain authority. The principle is the same, though the application may be different.

With all this must go one thing more. Business men must be made to see how fatal want of action on their part may be. Everybody knows we absolutely must have ships; but there is a common idea that the Shipping Board will be able to supply all that are needed. We have read optimistic predictions, and we have read glowing accounts of our success in fighting the submarines, and we have allowed ourselves to be lulled into a false sense of security by it all.

It is possible that we shall build three million tons in 1918. That, if we produce it, will be the amount estimated as the minimum that will carry 1,000,000 of our men to Europe and keep them going when they get there. The ice, in other words is very thin. Nobody knows better than Germany that if she can make our bridge of ships insufficient for the load we must put upon it we cannot win the war; and nothing it would seem, can be more certain than that she will try this spring harder than ever before to cut this vital line of communication if the strongest effort she can put forth will accomplish it. And the best we can hope for in the next six months is a narrow escape—even though we turn our best energies to the job. There is just one solution. We must pledge ourselves to make ships our first business in this crisis. A man whose community is being swept by a conflagration makes that conflagration his first business till the danger is over. But no conflagration has ever held so deadly a menace for every man of us, individually and collectively, as does this menace to that easily snuffed thread that makes our success in this war possible.

The key to the whole ship question is that the business men of the country must know the need for ships; and that they be educated to the idea of ships; that they understand that the winning of the war depends on ships; that they be organized to force and further the building of ships; and that they become, when so organized, the medium through which things will get done in their several communities.

Rochester's Record

THE War Shipping Committee of the Chamber is pointing to Rochester, New York, as an example of a community where the business men as a body have been educated to the point where they are capable of thinking and acting as a unit on all matters that concern the furtherance of the war. Rochester is making munitions; and it is taking care of a very big job in a way that should be characteristic of every community in this country, and by methods that should be the rule from the Atlantic to the Pacific; and it is just as applicable to ship building as it is to munitions making.

Rochester appears to have more than its fair share of business statesmen. Perhaps that was what gave it its running start in this matter. The whole ordnance making enterprise, as it has been worked out there bears the marks of the finest kind of leadership—the kind that educates not merely by exhortation and discussion, but by active example as well.

When large orders for ordnance were placed in Rochester last summer, the business men of

Rochester talked it over with Major Jamieson; and then immediately pledged themselves to see to it that the ordnance plants of that city should have all the labor and all the help they needed, regardless of personal sacrifice, inconvenience, and expense. That pledge included, among other things, mind you, producing the labor and housing it. It meant going the limit. The first and foremost thing with those trained business minds was that the thing must get done; and that nothing must stop it or hinder it. Such was the spirit of their pledge; and they kept it to the last jot and tittle.

It is an inspiring story. Not only did they bring in men from the outside, but they took men right out of their own employment lists, the very best they had—no sweepings or leavings, and turned them over to the munitions plants—turned them over to help their country win the war.

In Rochester, as everywhere else where large war contracts are placed, it was first of all a question of men and material, and all the complex problems that naturally go with a big influx of labor. What they did to meet the situation can be done anywhere. The plan is practicable, and it has already been worked out to its last detail.

A Labor Clearing House

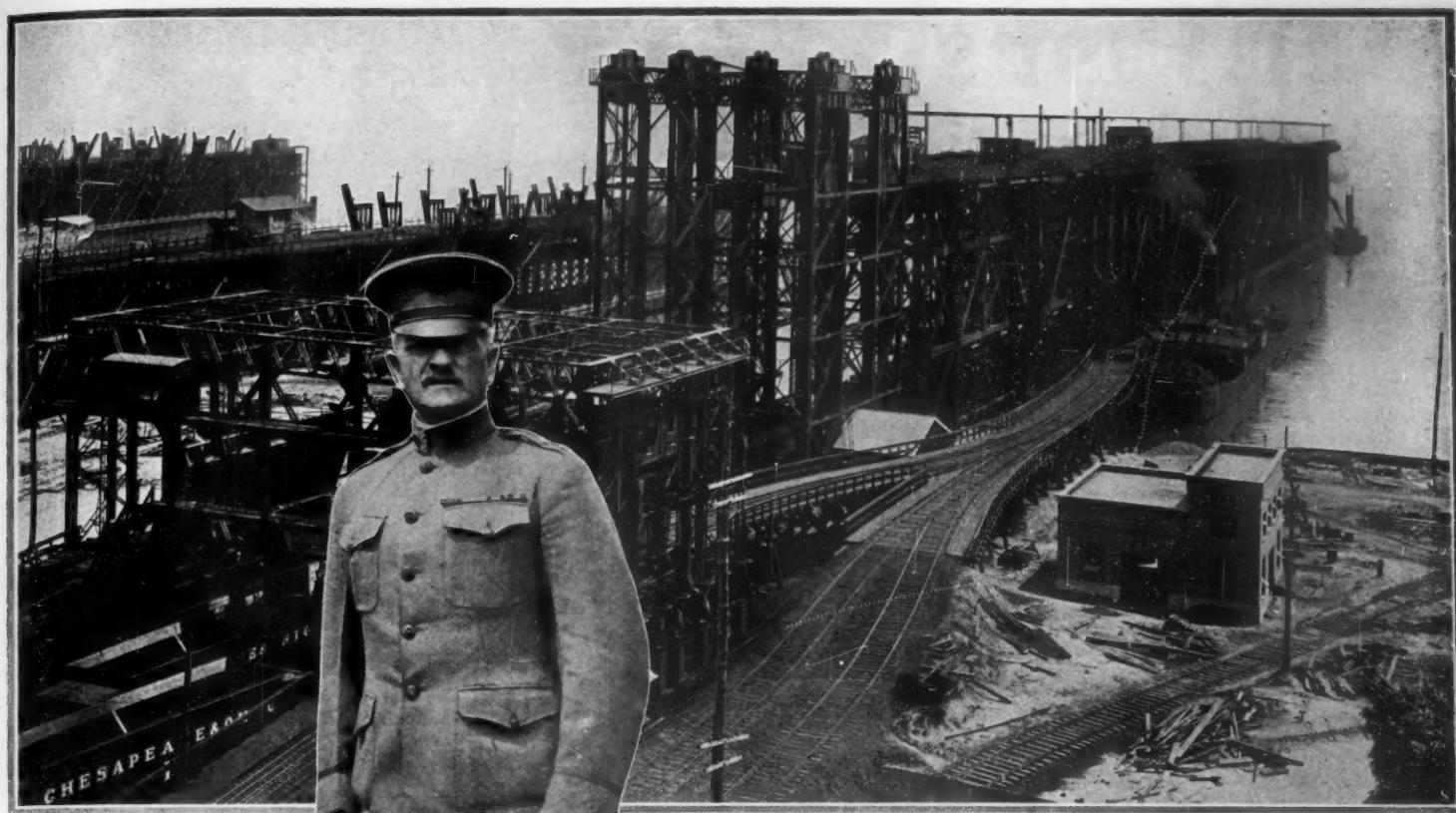
THE first essential in Rochester was that the manufacturers of the city should recognize that the government was not making its demands upon one munitions manufacturer alone, but upon Rochester as a manufacturing community. That is the first essential everywhere. It is particularly the first essential in all our shipbuilding communities if we are to have ships. Without that basic principle of action nothing effective can be done anywhere.

One of the first steps the men of Rochester took was to underwrite the expense of a co-operative employment office, and to hire a manager for it. They picked a good one; and paid him a salary of \$16,000.

The immediate result was that nearly two thousand additional first-class workmen were furnished to one munitions plant, and more than one thousand to others in the first three months; and from that time to this they have kept up the supply so perfectly that according to the government report the munitions plants have never been short a single workman. In addition they supplied their own labor needs more fully than ever before. Good feeling prevailed in the factories, for no firm was allowed to expand by disrupting the labor supply of another shop. Wages were adjusted upward to meet the increased cost of living; and aside from one small strike that was quickly adjusted, labor troubles have not showed a head in Rochester.

The city, in other words, assumed through its business men, the responsibility for the supply and distribution of labor and for the prompt settlement of labor troubles. And it went further than that, for the measures taken included maintenance of proper standards as to working conditions, wages, hours of labor, and housing.

The business men of Rochester hired their employment manager largely to guard themselves, because of the large responsibility they had undertaken. They wanted a specialist to study the situation step by step. They soon found, however, that the benefit went far beyond the occasion; and that it was good for them to know through a central channel, what they all needed or would need in the future. Moreover, it brought friendly co-operation from labor; and the consequence is



that Rochester is now experiencing the biggest boom in its history. It is the old story of doing the right thing instead of the short-sighted, selfish thing.

Not every community is making ordnance or building ships; but there is no community that does not have the opportunity to contribute more or less directly to this war in one capacity or another. Here is a town that makes accessories for ships; here is another that can contribute a quota of skilled labor; here is another that can perform some service that has nothing directly to do with ships. And the point is that the Rochester plan will work and is needed everywhere.

The War Shipping Committee of the Chamber of Commerce of the United States has been in existence and at work since last May. The first organization was intended simply to back up the plans of the Shipping Board. It carried on part of its work through local committees in some 27 Chambers of Commerce in different parts of the country. These local committees were formed with the idea of proffering help to local shipbuilders. Much good resulted, but it was soon found that the attitude of simply offering help when help was asked for did not result in the most help being given. In many places the shipbuilder does not know he needs help. Or else he may be too busy to explain the kind of help he needs if he wants it. The plan was therefore changed to the only one that it seemed would be fundamentally helpful, namely regular meetings of the officials, directors, and members of the ship building committee of the locality with local shipbuilders. The general plan is that the shipbuilders meet with these others, as if all were partners in a common business, to solve the business and production problems as they arise.

Ships and coal took Pershing and the rest of them to France—ships and coal must keep them there. This great coal dock is worth the fortune it cost because it shaves down the seconds in loading ships. The ordinary rate of dumping is 30 cars an hour. This machinery doubles it

It is, of course, highly necessary to the success of this plan that the shipbuilders be willing to lay down the cards on the table, so that their accomplishments may be measured by their schedules, and so that they may get praise from their fellow business men if they succeed and help in such problems as are not technical shipbuilding problems, but are vital to their progress.

The shipbuilders' job has been a losing game. He sustained himself by minute attention to business, and by saving every penny. His only chance lay in doing business in the most careful way. When the expansion in shipbuilding came, he was called on to revise all his experience. This was the more difficult because as a rule the shipbuilder had never in the past been forced to take an extensive part in public affairs like men in other kinds of business. Any business, be it shipbuilding or something else, that could have the help of all the best business minds of the town would undoubtedly get along much faster.

This undertaking of making ships on so unprecedented a scale is like a man telling me he intends to lift a certain building by himself. I may smile skeptically and think he cannot do it; but if it be absolutely essential to my welfare and to that of the community that that building be raised, I will turn to, procure machinery, find help, and assist him in his important task. I don't just leave it to him to finish what I know to be a most difficult job. Too much depends on it for that. It is just so in the building of ships. The shipbuilder must not be left to go it alone. We cannot leave the outcome of so vital a matter uncertain. We must make it certain.

I have in mind several incidents that will serve to leave a concrete impression of this fact in the reader's mind.

On a recent trip to a shipbuilding city in the South I saw a new ship that had been lying idle at a certain Gulf port because it had no anchor chains. The owner could not get them, though he had sent frantic appeals to Washington. The reason was that anchor chains are at this time difficult to get. I asked certain business men there if they could not have gotten those chains if they had undertaken it in behalf of that ship owner. They said they believed they could have put it through; and they said they would make the attempt at once. The notion of doing such a thing simply had not occurred to them. They needed the Rochester plan of organization. If they had had it that particular oversight could not have occurred.

Here is a second example.—In another city there was a grade crossing where freight trains blocked the approach to a shipbuilding plant. In consequence the workers were delayed in stormy or fair weather every morning and evening—sometimes as much as twenty minutes. The Chamber of Commerce, which had organized to help the local shipbuilders took hold of the difficulty and had a bridge over that crossing in record time.

Getting Action

IN still another city a delay of weeks in the installation of electric power necessary for building ships was settled within three hours after the local Chamber of Commerce found out from the shipbuilders how they had been delayed.

In another case a vitally important man—a specialist—was turned over to a shipyard voluntarily after it had been explained to the private company (*Concluded on page 37*)

War Plans for Peace Plants They Will Be Encouraged To Shift to Necessities or To Save Labor and Materials by Wise Self-Regulation

By GEORGE N. PEEK

Industrial Representative of the War Industries Board

INDUSTRIALLY, the first problem of the Government is to secure the necessary supplies for the conduct of the war without too seriously interfering with the production of necessities for the public welfare. The second problem is to insure continuance of our industrial strength after the war.

Shortages of many classes of raw materials and of labor in different lines are evident. Transportation, both water and rail, is obviously short, and the need of industrial readjustment is apparent to make room for the war requirements of our Government and our Allies.

These problems may be solved by making provision for the entire requirements of the Government in such a manner as to utilize to the fullest extent present productive capacity. In many cases, the facilities of less essential industries should be converted to essential production.

The discussion of the "limitation of 'non-essential' industries" started with a very unfortunate misuse of words. The idea, as exploited in the newspapers, that the Government intended to cut off "non-essential" industries, had in it possibilities for disaster.

All industries are closely interrelated. For instance, certain so-called non-essentials may be sent to South America to pay for commodities absolutely needed for essential products and no large class can be arbitrarily cut off without seriously affecting general business conditions in the country. Certainly no industry is non-essential to the workmen and capital employed therein, and when one considers that over ten million people and thirty billion dollars of capital are employed by "non-war" industries, the need of caution in dealing with this problem is manifest.

On the other hand, our industrial equipment is limited. We do not have materials, machinery, transportation, labor or capital sufficient for fighting the great war and for normal business at the same time. The war must be prosecuted to the utmost and business must shrink to provide the necessary equipment with the least possible injury to the business of the country.

Restrictions With Least Injury

THE first consideration of the nation and all of its industries must be to contribute the utmost toward winning the war, and to that end business must, where necessary, be diverted from its established channels into new channels; or if absolutely necessary, the flow must, during the war, be entirely stopped in order to provide adequate labor and material for war needs. It does not, however, follow that there will be less business than usual, but rather more unusual business.

If the so-called "non-essential" industries

are cut off many of them would be ruined and others permanently crippled.

The Fuel Administration has worked out a plan which provides, in part at least, for necessary restrictions with the least possible injury to industries. This plan provides for fuel curtailment by the following steps:

Voluntary agreement by each non-war in-

The Board's policy is to work forehandedly. It investigates forthcoming supplies and demands, to see where shortage is threatened; then introduces such economies as will prevent the shortage, or keep it from becoming needlessly acute.

Cooperation of business men with the Board is voluntary. The Board can not compel adherence to its recommendations by legal process. In fact, its purpose is to make such compulsion unnecessary. It works on the theory that there are considerable needless uses of labor, materials, equipment, and capital in all businesses, and that by forehand action and with voluntary cooperation from business men enough of these uses can in most cases be eliminated to meet government requirements without resorting to more drastic methods.

Of course, there are certain commercial and industrial resources which can not be handled adequately for the government's purpose in this way. In urgent cases these resources must be diverted quickly from the less essential to the more essential uses, in whatever manner seems most effective. But in most instances, at least for the present, the voluntary methods described would seem to be sufficient.

The Board is now carrying on campaigns for conservation in several industries, including the manufacture and distribution of wool and woolen clothing, leather and shoes, and paint and varnish, and in the service of wholesale and retail stores. The Board is also making preliminary studies of other commodities in which, because of shipping or other conditions, there is a possibility of shortage.

The Coal Outlook

ON account of transportation conditions, the United States, according to the Fuel Administration, will probably mine little if any more coal in 1918 than in 1917.

1916 coal production approximately 575,000,000 tons.

1917 coal production approximately 630,000,000 tons.

1918 coal production estimated not to exceed 630,000,000 tons.

War industries and railroads must have at least 100,000 tons per day more than they had in 1917, or the flow of war necessities will be dangerously interrupted. This increase must be met by curtailment of the so-called "non-essential" production and by economy at every furnace door, both household and industrial.

The demands for 1918 to carry out the programme for the production of necessities for the war, in addition to normal business, would greatly exceed any possible production and distribution of (*Concluded on page 40*)

A Business Banquo

HERE have been attempts to lay it, but an ominous specter still sits at our industrial table. It is the question of how the government is going to regard those of our companies whose products are not necessary to the task of removing the plague of Prussianism from the earth. So heavy are the present demands on labor, materials, fuel, capital, and transportation that it would be easy for a single order from a government agency to utterly wreck an industry representing invested millions and supporting thousands of families. Mr. George N. Peek was called here to Washington and given the task of adapting peace factories to turn out war supplies. We asked him for an expression for the guidance of our readers and the result is before you. Mr. Peek explains that "this is entirely unofficial and must be so regarded, but it may be of help in answering inquiries as to the attitude of some of the men in Washington upon this most important subject."

The Editor

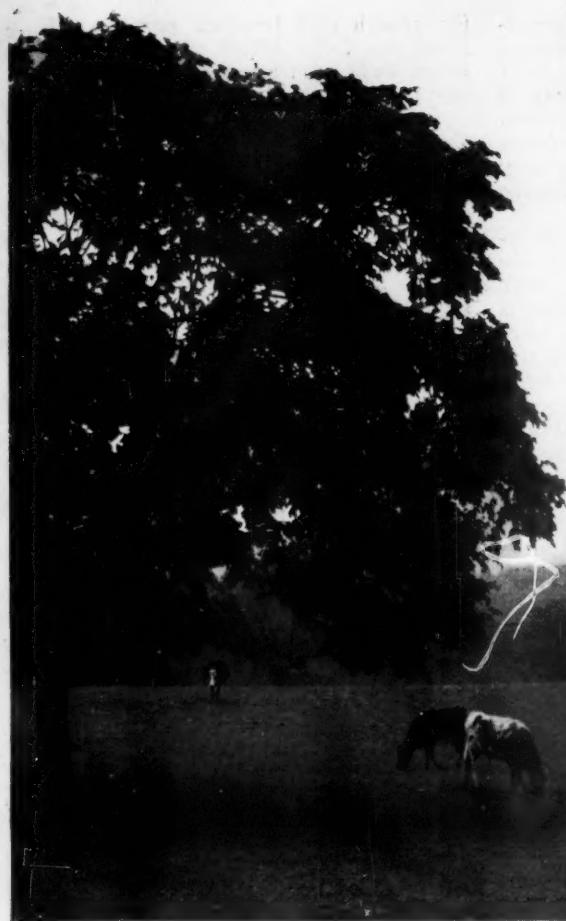
dustry to limit the least essential parts of its product—each industry making the reduction where it will do the least harm.

Formal order from Fuel Administrator making legal and binding on the entire industry the various restrictions voluntarily agreed upon.

This plan applies directly to actual fuel consumption only. The actual effect is to limit production. Consequently, limitation in the use of fuel will make a corresponding saving in transportation and in war materials. The fuel saved will vary according to the character of each industry.

The above plan has already been tried out enough to prove its practicability. In each case the industry has given its heartiest support and shown its desire to cooperate with the Government in every possible manner. The voluntary saving shown by the industries already called into conference promises to be 15 million tons of coal. The brewers have voluntarily agreed to save 700,000 tons of coal; the box board manufacturers will cut their running time to five days a week. This will save one million tons of coal and take 30,000 cars of merchandise off the railroads.

The Commercial Economy Board of the Council of National Defense has undertaken to cooperate with business men in eliminating, as the government's requirements demand, needless uses of men, materials, equipment, and capital in all lines of commercial business; in other words, to conserve commercial resources as necessary to meet the government's need.



Beef and the Banker

How Careful Financial Aid Is Putting Cattle Credit on a Par with Commercial Paper, thus increasing the World's War Ration of Beef

By F. N. SHEPHERD

Member Agricultural Committee of the American Bankers' Association

WHAT a man, a community, a nation can do, suffer, imagine or achieve depends upon what it eats. Bran-eaters and vegetarians are not the kings of men. The races that live on beef have ruled the world; and the better the beef, the greater the deeds they have done."

However much we may be unwilling to subscribe to this opinion, there is no disputing the fact that our success at arms depends upon such supply of beef and other palatable animal fats as we are able promptly and properly to deliver to our allies and soldiers in the cockpit of Europe. Desk lubbers at home, we may boast to our friends about cereal, bran-biscuit breakfasts and fleshless dinners of vegetable soup, lettuce and cheese, macaroni, but, in the presence of army dieticians, we will not argue the fact that under present conditions white men who fight must be fed on meat.

The doctors tell us that a daily fat ration of 40 grams to each person is necessary to life. For some time Germany has been down to 28 grams, eight of which she got through neutrals and from us by way of Holland. Of late we have been less complacent. Our War Trade Board has taken a hand and shut down the lid. If we can hold him to 20 grams we will soon have the Hun on the hip.

Ours is not simply a problem of denying the enemy, but of providing for our own and our allies as well. The question of food animals is of more concern to Mr. Hoover today than the question of wheat.

As regards cattle, the situation is something like this:

There has recently been a world decrease of 28 million head. This loss is almost six per cent of the 480,000,000 head owned in 70 meat producing countries of the world. The total figure represents the average for the years 1902 to 1916. Cut off from the imports of concentrates for food, Germany ordered at

one swoop the slaughter of one-tenth of her milch cows. Poorly preserved, most of the meat decomposed and was unfit for food. Into the maw of the German Army the livestock of Belgium and northern France has disappeared. The beef animals of France have rapidly diminished and the milk supply is being encroached upon. A similar condition prevails throughout the other war-ridden countries of Europe.

In the United States the day of the large open range, when beef cattle migrated with the seasons, is almost past. Yielding to the advance of the plow, millions of acres of once public domain are now in crop. For the most part cattle are kept on farms. Some fifteen years ago we were exporting \$150,000,000 worth of beef annually, but before the present war began we were importing beef. Under the stimulus of Mr. Hoover's meatless days and the cooperation of the American housewife, we are now sending beef to our allies at the rate of twenty thousand tons a month, which is at the rate of 240 thousand tons a year with a present estimated value of \$72,000,000. The total of all beef, fresh, canned and pickled; sausage, bacon, pork, etc., for last year, was 684,717 tons, valued at \$391,212,000.

Cattle Loans Among Best Assets

ACCORDING to the estimates of the Department of Agriculture given to the public February 8, the total value of cattle of all kinds in the United States is \$2,423,698,000. Although the world's supply of cattle has considerably diminished, the United States shows an increase for 1917 of about two and a quarter million head. While the number of milch cows increased 1.7 per cent, their average price per head jumped from \$59.63 to \$70.59. Quite a contrast with the \$35.29 of 1910. Of cattle other than milch cows, there was a domestic increase during last year of 4.5 per

cent, and a price increase per head from \$35.92 to \$40.88. The enormous demands for the by-products of beef, particularly leather goods, such as shoes, harness, saddlery and army equipment, have considerably influenced the price of cattle.

While tending toward the curtailment of the industry, the cutting up of the vast open cattle ranges had a stabilizing effect, in that animals now largely kept under fence are no longer subject to the vicissitudes of the seasons for water, shelter and food. This change has put the industry on a more scientific basis and made more desirable loans based upon cattle as security. Owing to abnormal conditions, recent values show striking increases, but experience has shown that while for the most part the value of cattle varies widely over extended periods, the fluctuation over short durations is not large.

Upon the proper credit facilities depends largely the future of the industry. The American banker is today looking upon cattle paper with greater favor than ever before. With memories of the losses of the seventies, when range animals, at the mercy of the elements, largely shifted for themselves, it is not long since a New York banker warmed to the proposal of a loan on a herd of cattle with about the same enthusiasm as upon a band of Alaskan reindeer. An examination of the note cases of eastern rural and metropolitan banks and trust companies would now reveal among their prized liquid assets millions of dollars in loans upon beef cattle. In fact, several of the larger New York and Chicago banks have reached out into the cow country for a vice-president, who, with an assistant cashier for an understudy, specializes in cattle loans.

Close to the soil, with a first hand knowledge of conditions, the country banker has long regarded cattle loans as among the best assets in his portfolio. He knew the livestock

farmer was selling a finished product in the form of beef, rather than a raw material in the shape of corn or grain or hay; that each bushel of wheat carted to market meant a soil depletion of mineral salts—gone forever, while every ton of manure left on the farm had a fertilizer value of several dollars. Experience taught him that cattle on every farm assured more prosperous rural life and sounder banking conditions.

In every way possible he has encouraged the increased production of beef. Acting alone, as well as through the agricultural committees of forty-odd state bankers' associations and the Agricultural Commission of the American Bankers' Association, he has helped organize calf clubs and baby beef clubs, giving prizes to the boy or girl who would show the best results. Through his efforts thoroughbred animals have been imported by the car load and allotted among the farmers on small payments at cost, often without interest.

While thousands of banks have made cattle the basis of loans, and many such institutions at shipping centers have become known as livestock banks, the cattle loan company, the development of recent years, has become the specialist for the production, assembling, distribution and sale of high grade paper based upon cattle as security. Located at the livestock centers, these companies are manned by experts versed in the industry and with a first-hand knowledge of men and conditions throughout the territory of their operations. They buy cattle paper from the local bankers or lend direct to the producer or feeder. In turn they reach the reservoirs of credit by placing the paper among a widely scattered clientele of banks and trust companies in a manner much the same as commercial paper houses.

Minimum of Risks

CATTLE paper easily falls under three heads: Live beef loans, stocker loans, dairy loans.

Live beef loans, or, as they are often called,

"feeder loans," are usually made for the purchase of steers to be put on feed for fattening. Where the borrower is a man of known ability and integrity, and has an ample supply of feed and the proper facilities for housing, watering and caring for the animals, the entire purchase price is often lent, and as security a chattel mortgage is taken covering both the cattle and the feed.

The element of risk in these loans is reduced to a minimum because the animals are well housed, well fed and under close fence where the liability to infection or disease is small. They gain in weight daily and therefore constantly increase in value. But this increase is not due alone to the gain in weight. The beef of a fattening animal improves in quality and a steer ready for the block brings two or three cents a pound more than one going on feed.

In the fattening pen steers gain in weight on an average of two pounds apiece per day; hence, as the animals approach the day of sale the value of the security increases on account of both quantity and quality. Experience teaches that it is reasonable to expect that a steer entering the fattening pen at one thousand pounds weight will increase at least \$20 in value on two to four months' feed.

From the commercial banker's view-point live-beef loans are the most desirable class of cattle paper not only because they are based upon a life necessity for which there is at all times a ready market, but because they are of short duration and self-liquidating. They are bought with assurance by bankers who understand them and are regarded highly as secondary reserve. Such cattle loans at present bear a somewhat higher rate than prime commercial paper. Section 13 of the Federal Reserve Act permits their rediscount by member banks provided the maturity period is six months or less. The supply of feeder loans is seldom equal to the demand.

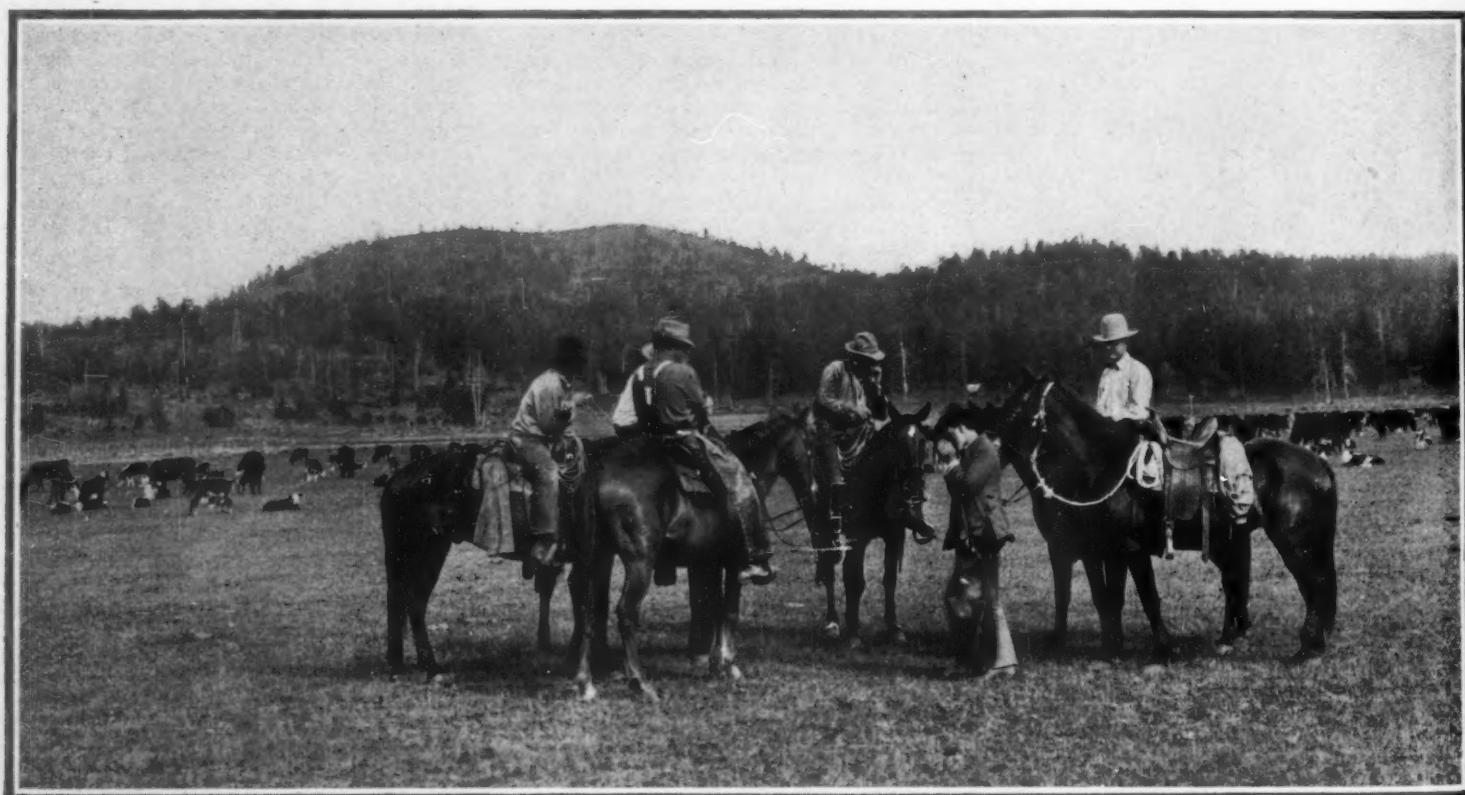
Stocker loans are those made against stock cattle, such as cows, young heifers and steers, which are kept upon ranges, farms or ranches

for growth and breeding purposes. These loans run for a longer period than feeder loans, their term usually being from one to two years.

Through the natural increase in calves and the growth of young animals the security behind the stocker loans increases in value during the life of the loan. Where made on cows alone the natural increase is occasionally sufficient to liquidate the entire obligation during its life of eighteen months to two years. Stocker loans are usually drawn for a six months' period with the privilege of renewals. By reason of their longer duration they are not so desirable for the commercial bank as the more liquid feeder loans. The element of risk is small, however; they bear a compensatory rate and their absorption by banks and investors is absolutely necessary to the success of the industry.

Cattle Loans and Commercial Paper

THOSE loans made to the farmer or dairyman upon milch cows are dairy loans. The presumption is that the obligation will be liquidated out of the proceeds from the butter fat. These are usually long-time loans and paid in small installments at monthly intervals. Where the borrower knows his business, and is well situated as to caring for his cows and disposing of his product, the loan may be safe and its acquisition good business for the local banker, but it is not of a type that is liquid or eligible for rediscount or ready sale outside the community of its origin; hence as an asset of commercial banking it cannot be held in the same esteem as feeder or stocker loans. The Federal Reserve Act, admitting for rediscount cattle paper with maturities up to six months, and the increase at the livestock centers of cattle loan companies and live stock banks that are specialists in their line, have done much to standardize cattle loans and make the farmer's or stockman's paper, based upon such security, desirable, saleable and widely known. The ultimate effect of this will be (Continued on page 38)



Cowboys watching a big herd on a government reserve in the Northwest. Chaps are worn not to verify the movies, but to protect the men from brush and limbs that whip their legs as they gallop through the timber after rebellious steers

WILL THEY GET WHEAT?

An Answer to the Question the World Is Asking as the Hordes of the Hun Seize upon What Was the Russian Empire

By VERNON KELLOGG

FROM the very beginning of the Austro-German negotiations with the Ukrainian representatives, the Teutonic officials repeatedly emphasized the high desirability of an immediate arrangement for the "resumption of economic relations" between the Central Empires and southwestern Russia. Most of the great Kazan wheat region lies in the Ukraine. It can be easily understood why it seemed desirable to half-starved Germany and Austria to effect "economic relations" with the Ukraine.

But now that these relations seem to be actually effected, how much is it really going to mean for the food relief of the Central Empires? Can we pierce sufficiently that heavy veil that obscures most of Russia, to see what hope Germany may fairly have, and what dismay we should fairly face, because of the new turn of the Eastern kaleidoscope? The seeing is not good, as astronomers say of a cloudy night, but it is not all darkness.

Before Serbia was occupied by the Austrians, it had under cultivation, outside of pasturage, a little more than two and a half million acres. In July, 1916, the Austro-Hungarian military governor reported that in the occupied territory, (which included almost all of the country) about one and one-third million acres were under cultivation, and this after he had done all in his power to stimulate production by supplying seed and agricultural implements, and compelling the cultivation of government, church and unoccupied lands.

Last year (1917), some little increase in the cultivated area was effected, but it has been slow and uphill work, even with all the Teutonic efficiency and all the Teutonic brutality of compulsion, for Austria to get any such food advantage out of the occupation of Serbia as was hoped for, and, indeed, counted on.

When Roumania was successfully and swiftly invaded, the Berlin war publicity office and the German press gave out most gleeful and encouraging statements to

the hungry people of the empire concerning the food relief that was to come to them immediately from this occupied region.

But, thanks to the very effective work of the British Military Mission that was attached to the Roumanian Army at the time—amazingly effective work under the circumstances of the very limited time available—there was little for Falkenhayn's troops to glean for the fatherland after the Mission had done its work.

But with time, hard work, and thorough organization, Roumania has been made to yield some food for the Central Empires. It did not come, however, immediately. It came from the crops of later years.

one considers all the circumstances.

According to the official Russian publication "*Recueil de Donnees Statistiques et Economiques*," the Russian total cereal crop for 1912 and 1913 was more than one-seventh larger than for the two years 1914 and 1915. In 1916, the crop was more than one-fourth smaller than the average of the two pre-war years 1912 and 1913. No figures are given for 1917, but "*La Gazette du Commerce et de l'Industrie*," published in Petrograd by official authority, indicates plainly, in various numbers of June, July and August, 1917, that the progressive reduction of the cereal crops noticeable in 1915 and 1916 was still more marked in 1917.

This journal notes with consternation that of 900,000 farm machines of all sorts ordered from Russian factories in 1916, no more than 13,500, or one and one-half per cent of the total needed, were supplied by the end of May, 1917. Already in 1916, the falling off of imports of farm machines was enormous.

In addition, the cultivation of great areas of wheat and other cereal land was abandoned because of lack of farm labor.

The figures of reduced acreage and lessened yield of wheat given by Mr. Pickell in THE NATION'S BUSINESS for February are of interest. Mr. Pickell spent four months in Russia in 1917 and had exceptional opportunities for becoming acquainted with food and crop conditions. He states that the 1916 Russian wheat crop was twenty-five per cent below the normal in acreage and twenty per cent below the normal yield per acre. That left no surplus. The 1917 crop was forty per cent below the normal acreage and ten per cent below the normal yield per acre. That left Russia with a shortage.

If Mr. Pickell's estimates are well based, there are no reserves of wheat in Russia at all; not to speak, then, of supplies out of Russia for Germany. A

short crop in 1918 would mean a famine in Russia itself.

There are various officially reported facts that also throw light on the situation. In July, 1917, the Russian Minister of Food Supply issued a statement showing visible stocks of grain of only absurdly small quantity, and in the same month, the special government delegate for grain purchases reported only trivial amounts available at railways in Southern Russia. For over two years, now, Russia has had queries in front of its food shops.

However, these latter statements, even if facts, throw little light on the extent of the invisible grain stocks. (Continued on page 38)



It is notorious that the Russian peasant is a very large eater, and what would be more natural when difficulties of transportation made the selling of his grain difficult than that he should eat more of it than ordinarily. Also, if twenty million men were mobilized as best authority indicates, the requirements of cereals for these men would be increased by about one-half, which means the using up of no mean quantity of bread-grains.

Finally, how is it with the Ukraine? Is there another disappointment, at least as far as immediate relief is concerned, in store for the sorely tried people of Germany and Austria, whose leaders have effected another *coup* for relief's sake? Or is it true, as popular conception seems to agree, that huge stores of grain, which have been harvested from the great fields of the Kazan in the last three years and have been accumulated because of lack of opportunity to export, await the inrushing German agents?

The most reliable reports that have come out of Russia during the last three years tell an interesting story about crops and grain stocks. It is not a surprising story when

ROADS

Is toward Putting Capital into New Highway Projects

By ANSELM CHOMEL

WHEN we know the moment that the keel of the thousandth ship will be laid and the last bolt of the last aeroplane tightened, when a million men are in France, when we know that we shall have locomotives and cars and terminals, as many as we need, when inland waterways are floating a thousand war-laden barges to tidewater, when we feel that now we are ready to begin this war in earnest and fight it through to the bitter end, and a patriot takes his stand by the Statue of Liberty to sketch "Victory Setting Out from America," someone will arise and demand to know:

"What about the highways of America?"

It will be a pertinent question. Good highways are not the least among the things we stand in need of, for from them must come much of the power which is to crush our enemy, Germany. It is not true that armies travel on their stomachs; they travel on roads. The industries which back the soldier depend at some point of their operations on roads. Without good highways, or at least passable thoroughfares, our railroads and our factories would grow rusty through idleness, and the ships we are building would tug empty and deserted at their moorings in our harbors.

Speaking of our road system as a whole, the highways of America are ill equipped for the task ahead of them. Much new construction is needed, urgently needed. The Government believes, however, that in these perilous days road building is a good deal like Doctor Johnson's cow—useful in the right place. The cow destroyed the vegetable garden, and the construction of highways in the wrong place or the unnecessary place at this time, especially if carried on a colossal scale, might seriously embarrass the Government in the prosecution of war.

Washington, therefore, has determined to prevent, if possible, during the war, all road work which does not contribute to military preparedness. It will not be necessary that every highway improved should possess strategic value or be used for the transportation of troops or munitions. One which protects the public health or is an economic necessity helps to the one great end which the country has in view.

Secretary of Agriculture Houston says that "So far as it is practicable to do so, this department will urge the maintenance of the highways already constructed, the construction and completion of those highways which are vitally important because of their bearing upon the war situation or for the movement of commodities, and the postponement of all highway construction relatively less essential or not based upon important military or economic needs."

Secretary of the Treasury McAdoo, who as Director-General of Railroads is an important

cog in the machinery for carrying out the Government policy, announces that he will cooperate with the Secretary of Agriculture "by transporting materials for the construction of national highways designated by him as a military or economic necessity, when the equipment is available and not needed to

general plan to conserve the borrowing power of the Treasury. In its double role of bond broker and tax gatherer, the Treasury has to raise billions and yet more billions. The country is expected to lend to the Government its last farthing. Its ability to furnish the means required can be stretched a good deal, but it is not unlimited. The man

who goes without a new overcoat in order to buy one more Liberty Bond cannot, with his feet on the ground, go without a new pair of shoes for the sake of buying a War Savings Stamp. If, after going without an overcoat, he is tempted by a state, county, township or city to buy bonds for the building of good roads, a new jail or a bandstand for free concerts, the Government may not be able to raise all the billions which it needs. Therefore it asks that the citizen with funds in his pocket to invest be not tempted unless the proceeds of the sale of securities are to be used to win the war. It warns the country against over-stretching credit, against taking the last farthing, because the Government needs it. We are conserving food and fuel, labor and materials. It is as necessary, in order to finance the war, to use sparingly the current savings of the people.

Curtailment of road construction during the war will result from the Government's policy, but not—unless the pruning knife should be used recklessly—to the point of weakening national defense. To do that for the sake of conserving financial credit for the prosecution of the war would be like a railroad's letting its road-bed become to the last degree inefficient because it wanted to borrow money to get more equipment and more business to run over the rails.

"Non-Essentials" Among Roads

IT is plans and specifications for "ornamental" roads, and roads which can be dispensed with at present, which the Government wants consigned, for the time being, to the "dust and silence of the upper shelf." Hence every state which asks for Government aid will be required to set forth the specific purpose of the proposed improvement, its bearing upon the war situation, and the effect of delay of the work until 1919 or later. Those not asking for Government aid will be requested to furnish this information.

"Disapproved" will be written across the face of some, perhaps many, applications which reach Washington. A county whose object is to advertise the best roads in the state, or one whose chief contribution to the wealth of the nation consists of foodstuffs which cannot be classed as necessities, will receive a patriotic appeal to wait until the war is over. I recall the story of a district somewhere in the United States (one is not permitted to recollect geographical details too accurately) which proposes to issue bonds

Where Are the Roads?

By H. COLIN CAMPBELL

WAR has forced the transportation problem into the foreground. Only one thing will lighten the pressure on railroad and express companies, and that is to make the short hauls of freight a highway proposition. Motor trucks can easily handle short hauls, and have proven, where dependable roads are available, that they can carry freight and express in successful competition with the railroads. Everywhere companies are being organized to engage in intercity hauling of freight, but they can be successful only under proper road conditions. Several projects of this kind have recently been compelled to discontinue activities when the question "where are the roads" confronted them.

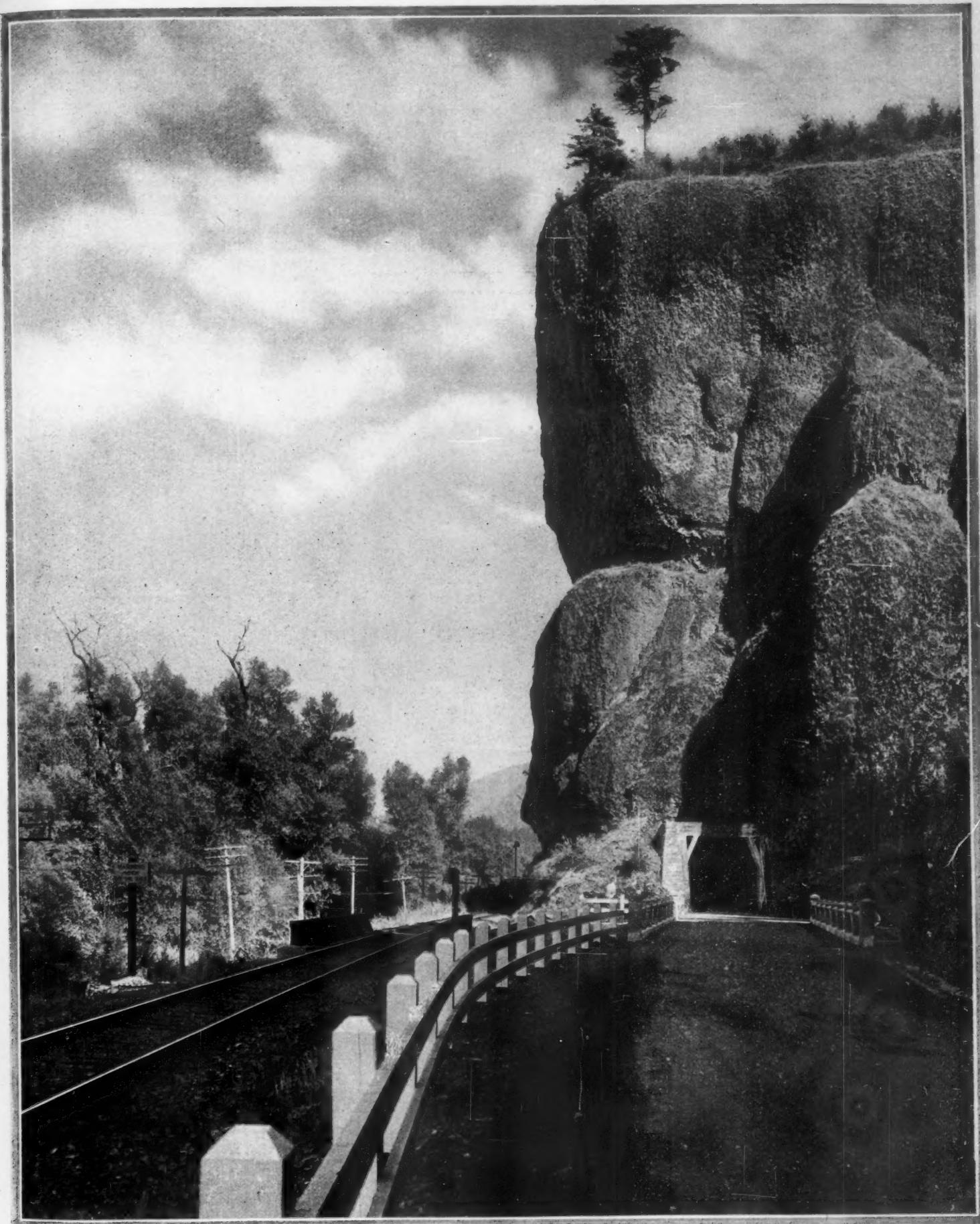
Good highways are a national necessity. They are a successful weapon in fighting the high cost of living. Railroad congestion will be with us for a long time to come. Merchants having found that in these days rail transportation cannot be depended upon for a prompt and uninterrupted delivery, are eagerly awaiting the day when better roads everywhere will make possible the extensive use of motor trucks. They mean better service to everyone. With State linked to State by systems of main market highways, we will be better prepared both for peace and for war.

move supplies for the Army, Navy, Shipping Board, or other Governmental activities."

Success in the difficult role which the Government has undertaken will depend upon voluntary cooperation on the part of the 31,000 road-building commissions of the country—state, county and township. Washington has no power to enforce compliance with its programme except where road construction hangs on Government aid. If Whitewash township has set its heart on building a new gravel road to the cemetery, the Government will try to argue it out of doing so on the ground that a safe and sane policy for the rest of the nation at this time is a safe and sane policy for Whitewash township. Most of the townships and other political subdivisions of the states, as the geographers say, see the point, and the indications are that, until peace settles down on the world once more, few, if any, important road improvement projects, projects calling for the outlay of large amounts of capital, will be put under way without Government sanction.

To make 31,000 road building commissions see their own projects as the Government sees them is the task of the Capital Issues Committee. Local public officials are urged to submit their plans for the issuance of highway construction bonds to the committee and to abide by its decisions as to whether or not they would constitute unnecessary interference with the financing of the war.

For there is where the shoe pinches. The Government policy is part and parcel of the



OUR three ways of moving freight—railways, roadways, waterways—are dramatically illustrated along the Columbia River in Oregon, where they run side by side through the red mountains of basalt. The nation and the community must realize that each of these forms of transportation has a distinct duty to perform by helping to deliver in France the full might of our blow. Roads with no value to this end are being discouraged.

to the extent of several million dollars for the improvement of highways. It is not a case of allowing the district to pull itself out of the mud—it is already well supplied with good roads. Reference to reports on agricultural and industrial output shows that the products of the district fall chiefly under the head of luxuries, in no wise indispensable to the winning of the war.

On the other hand, a community which can show that a proposed improvement will meet a war-time need may have not only Washington's approval but perhaps its financial assistance as well. I recall another story—this time of a county that wants to build a road which will give adequate outlet to an agricultural district which can supply much of the food that we need to send to Europe. And Army officers testify that that highway might, in certain contingencies, prove of vital importance in military operations. This applicant will go home justified, probably, rather than the other.

It will be in determining which roads are of military and economic necessity that the rub will come. It will be a poor commission which cannot make a fighting case for its own proposition. Highways which pass cantonments but may never be used for troops or munitions, roads which lead in the general

direction of factories making war stores but may be inaccessible to them, roads leading from some town to a seaport which might, sometime, be used to haul goods to ships—all of these are urged on the ground that they are military roads.

The Down-Trodden American Highway

IS the Government placing too much confidence in the highways of America, leaning on a broken reed?

"There is no real danger of a German invasion of the United States," said a man arguing with his neighbor. "Our uniform system of highways would make it impossible."

"Our—uniform—system—of highways?"

"Yes, uniformly bad, impassable to the boots of the Kaiser's men and the big guns of his artillery."

But after we have had our flings, what do the facts and the figures disclose? That America, road builder, all things considered, has not done so poorly as most of us imagined. Perhaps she has not built on the enduring foundation of the Romans, the road builders of the ancient world, who bettered the art borrowed from the Carthaginians. But then the Romans were at it longer and had much free labor save for the "keep" of their road building soldiers and slaves. We have thou-

sands of miles of good roads, over which an invading army could make very good progress indeed, roads in many cases as good as it would be used to at home.

It is true that 88½ per cent of the highways of the United States are paved with good intentions, and that but a meager 11½ per cent are improved (giving a liberal interpretation to the term), that is, "surfaced," including sand-clay and ordinary gravel roads. When it comes to really good roads, hard-surface highways of brick, macadam, first-class gravel and so on, these constitute probably two-thirds of the 11½ per cent.

Two hundred and ninety thousand miles (approximately) of roadway improved out of a total of 2,500,000 miles nothing to boast of? Consider the stupendous task of providing America with good roads or even fairly good ones.

Avoid the common error of comparing our road building record with that of Europe. Such and such a country in Europe has *all* of its highways improved, and so forth. To pave in first-class fashion all the roadways in the United States would cost more, possibly, than it will cost us to beat the Germans, establish the freedom of the seas, avenge outraged Belgium and make the world safe for (Continued on page 40)

What Congress Is Doing A Careful Interpretation of Measures before Our National Assembly with Their Application to Our Industrial and Commercial Outlook

THE legislating stage has been reached in this session of Congress and, unless all signs fail, the grist will be considerable. Committees will continue very active, but debate on the floor of House and Senate, and especially on the floor of the Senate while the House works over appropriation bills, has succeeded investigation and discussion in committee rooms. Both Houses have been making such haste as exigencies of lively debate permit, with a purpose of clearing the way for legislation which may later come forward, such as further taxation and the conduct of the war.

The Railroad Bill

TERMS for arrangements between the government and the railroads were, at the end of two months, pretty well settled. By the first of March the railroad bill had passed both Houses and was in the hands of conferees who were trying to reach an agreement upon differences in details about the manner of dealing with a four-billion-dollar business.

Most of these differences were easy to adjust. With the principle adopted of definitely limiting the period of federal control of operation there was no great task in striking a compromise at twenty-one months, by the ready expedient of splitting a difference. There was not any great delay in deciding, either, that the ratio of railway taxes in a state to all other state taxes ought not to be increased during federal control, but on March 13 the Senate indicated its new rule against conferees putting ideas of their own into legislation, by eliminating this proposition.

The President's determination of rates to be paid by the public was a more troublesome problem. Both Houses agreed that the President might have a hand in fixing rates, but the Senate allowed the Interstate Commerce

Commission to change the rates designated by the President. The House, too, wanted to continue the Commission's functions regarding rates, but desired to have its decision merely advisory to the President; he could follow the Commission's conclusions about justness and discrimination or disregard them, quite as he thought best.

The final conclusion upheld the powers of the Commission. The decision was that the President might file new rates with the Commission, these new rates to be effective until the Commission after complaint found them unjust or unreasonable. At the same time a provision that may ultimately prove important was inserted,—to the effect that if the President certifies to the Commission that increased revenues are needed by the railways the Commission is to take into account, in its subsequent consideration of rates, this statement as a finding of fact.

Although many open questions about this legislation were of importance to the railways, the outstanding principles of the law that was to be enacted were not in controversy. The basis for the net earnings which the government will guarantee is to be the experience of the individual roads in the three years which ended last June. The capital requirements of the roads, whether on account of maturing obligations or for new expenditures, will be assured, with the government, if necessary, underwriting issues of securities. Equipment and extensions may be provided by the government, at the ultimate expense of the roads. Experience may make necessary some amendments in details of the scheme, but for the present the legislation appears comprehensive.

In England railways seem to have become adjusted, in considerable degree, to government control. The companies which have announced their results for 1917 generally

report net revenue balances which are somewhat larger than in 1916, and have maintained their dividends.

War Finance Corporation

THE bill for a war finance corporation caused vigorous debate in the Senate before it finally passed on March 7. Having been introduced in the House on February 4 it had then already been considered by the Committee on Ways and Means, which had made its changes, written its report, and was prepared to place its recommendations immediately before the House, that debate might begin in the week of March 11, and the bill become law before the Third Liberty Loan is offered for subscription. The President himself has asked expedition.

The debate in the Senate differentiated sharply between the two parts of the bill,—the plan for financing industries that are connected with support of war and the proposal to make licensing of issues of securities in amounts over \$100,000 compulsory and disregard of the conditions imposed by the bill and by regulations a criminal offense punishable by fine and imprisonment.

The idea of the war finance corporation,—to provide for financing industries and public utilities, and even to support the government, if necessary, by subscribing to government loans,—was quickly accepted in the Senate. At the same time, the Senate extended the facilities of the finance corporation to enterprises not included in the first draft of the bill.

Savings banks were in the original bill allowed to borrow from the corporation on their securities, in order that, without sustaining serious losses by selling their holdings, they might meet any extraordinary demands made upon them (Continued on page 44)

Rain Fortifies the Growing Wheat as the Crop Invades New Territory

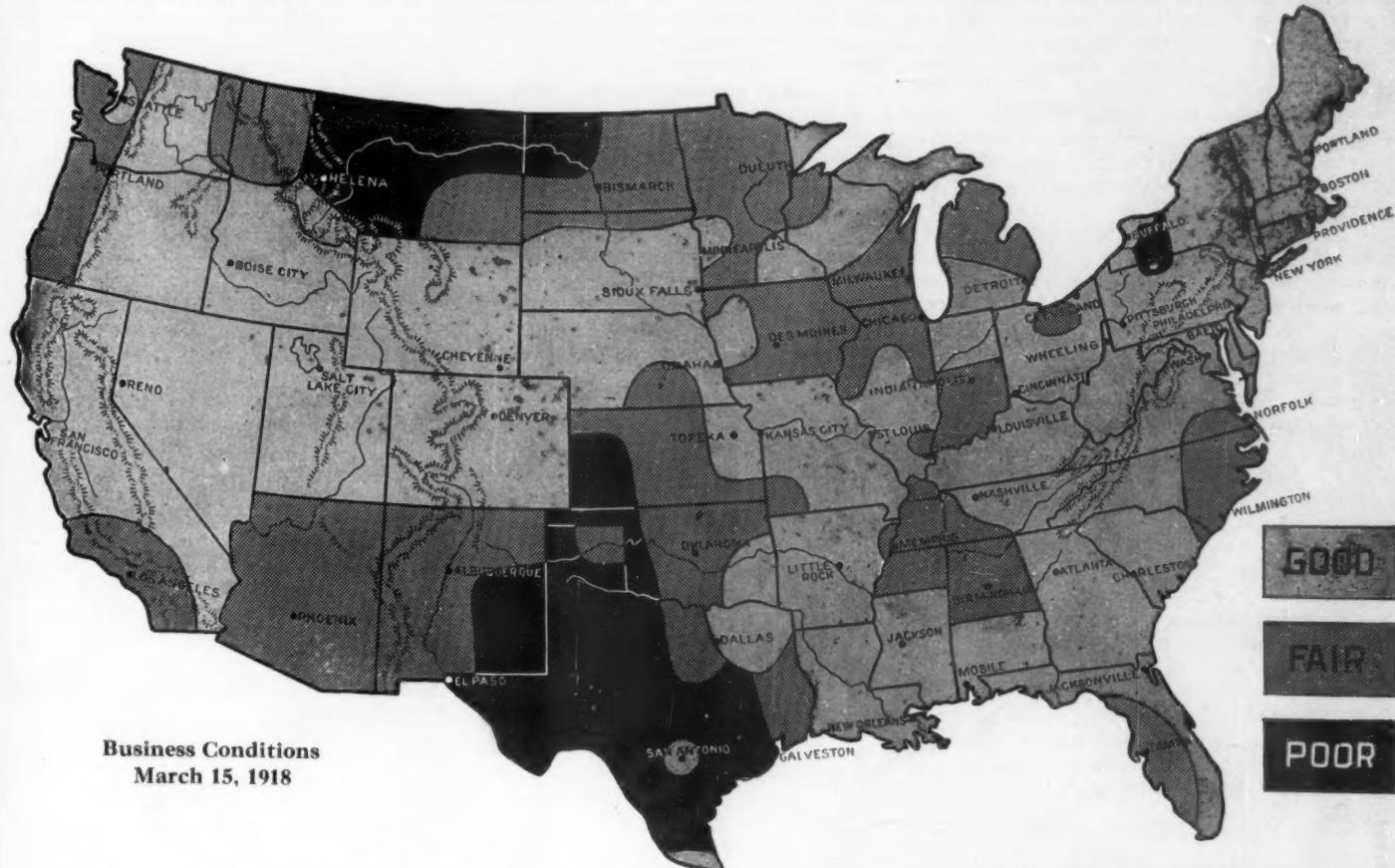
By ARCHER WALL DOUGLAS

ONE must have lived in the semi-arid West and Southwest to realize the far reaching importance and significance to the inhabitants of those thirsty lands of the rain that falls alike on the just and the unjust. This is why all the literature of the arid East of the Old World, from the Bible to Omar Khayam, has ever the imagery of Water as the Fountain and Renewer of Life, and of the Oasis as the refuge from the desert existence of this world.

Now the sequel to this admiration is the story of the recent Eastward flight of the Moisture Bearing Lows,

favorable weather. Any estimate at present of the probable yield is mere idle conjecture and serves no useful purpose. We will know more when March winds cease to blow and April showers usher in the welcome spring.

From Oregon and Washington comes the assurance of a certainly greatly increased acreage in both Spring and Winter Wheat. The acreage of early spring vegetables is very large and the supply already in abundance, with declining prices. The acreage of Bermuda onions in Texas alone is 50 per cent greater



coming in from somewhere in the Pacific, over the top of the snow-covered Sierras and the towering Rockies, and across the Great Plains States until they were lost in the blue waters of the Gulf in Southeast Texas. Everywhere as they went, in John Ruskin's phrase, they "melted away in a dust of blue rain," reviving the burnt up grazing ranges of the West, adding millions of bushels of wheat, and many more millions of dollars to the farms of Oklahoma and Kansas and bringing cheer and hope to the parched plains of West and South Texas. Only Texas, like Oliver cries for more—and needs it.

The winter wheat crop still holds the lead in the Agricultural Stage with very great improvement from recent precipitation. It is impossible to tell, even approximately, what is the condition of the growing plant, other than it seems a case of so far, so good. There is abundance of moisture over practically the entire wheat belt and the prevalence of generally

than last season. Unknown and unnoticed by all save a few, there is going on in all important agriculture the steady development of many apparently little things, all tending to make surer our unsailable and invulnerable position as the country which not only feeds itself but much of the world besides.

In five years the annual value of the Rice Industry in California has grown from \$75,000.00 to \$12,000,000.00 with a prospective increase this year of 40 per cent in the acreage of this grain which constitutes the almost sole dependence for food of very many millions of Earth's inhabitants. Also in the Golden State the acreage devoted to lettuce has increased in nine years from 600 to 6700 acres. In the Great Plains States there is being grown a variety of wheat known as Emmer. It is new to this country, but seems undoubtedly to be the original form of wheat, and was already old in Egypt when (Continued on page 36)

A Boost for Little Business

By REPRESENTATIVE E. Y. WEBB

Author of the Webb-Pomerene Bill

THE Webb-Pomerene Bill gives the American business man a fighting chance in foreign markets. It is his charter of rights, so far as the laws of the United States are concerned, and his defense against the destructive methods of European competition.

What is wanted is not so much to create a new American export trade as to save the one we already have and permit it to grow. Our foreign trade, even before the war, was no infant. Now that it is a man, it is time for it to put away the things of the child. Certain timid souls amongst us have hesitated to give it the right to do that for fear it will get into our domestic pantry and eat the jam. I think we can keep it out of the domestic pantry. If it gets any jam, it will get it honestly, through cooperation and greater efficiency, and it will not be our jam.

In a way, this measure is a defense of the domestic pantry against the jam-seeking expeditions of foreign buyers, who, by playing one American exporter against another, beat down the price of many of the things we have to sell abroad.

What may we expect to follow the enactment into law of this bill which will usher in this new freedom in international trade? I think we shall see, very shortly, the organization of many export associations to push the sale of American goods in other countries. I think we shall see greater energy, greater enthusiasm, greater intelligence devoted to export trade. I think we shall see our manufacturing plants working more steadily, the costs of production lowered, the wealth of the country increased.

Coming to practical, every-day, working considerations, what sort of associations will be likely to be formed under this law, what will they do, who will compose them?

Different Forms of Combination

JUST which industries probably will come together for the purpose of cooperating in foreign trade it is, of course, impossible to foretell. We know that certain lines of trade have been interested in securing the passage of the measure. There certainly will be lumber associations. There may be a combination for export trade in farm machinery. And wheat. And a hundred other things. It probably will be found that the first to organize will be those engaged in the manufacture of standard articles, as the makers of what we call "specialties" do not stand so much in need of relief.

As to the specific work which these associations will be formed to do, let me quote a paragraph from the testimony of a man who appeared before the Senate Committee while this bill was under consideration:

"The forms which cooperation would take are diversified, depending upon the multifarious conditions obtaining in foreign markets. There might be an association formed of competing manufacturers for greater economy of foreign sale and shipments, or it

The Big Fellows Stand Alone, but the Smaller Ones Need National Support To Keep Them in the Foreign Markets

might be a combination of manufacturers of kindred but noncompeting articles in order to create the full line which can be handled economically, or it might be a combination in natural products to prevent this playing of one producer against the other to depress the price, or it might be a combination of exporters of unrelated lines in a certain country to reduce selling costs. I think that the associations which it would be desirable to form would vary in organization according to the circumstances of the market in which they tried to deal, and particularly the conditions of competition there encountered."

Working Under the Tyranny of Fear

I SAID a moment ago that there probably would be combinations for the export sale of lumber. I might make the statement stronger by saying that the lumbermen in at least one section of the country have been ready for some time to organize. They were, in fact, all but organized when someone shook a stick at them and threatened them with the Sherman Law, whereupon they pigeon-holed their by-laws and contracts and waited for the signing of the charter of international trade.

A statement of the situation fronting the lumber industry, taken from the testimony of Mr. McMicken, who appeared before the committee for those interests, will show why American business men want to organize in foreign trade. Furthermore, it will aid the imagination in forming a picture of how the different industries will take advantage of this law. It will show, too, how business men have lived under the tyranny of fear. One man who appeared before a Congressional committee on this subject said that he had been trying to talk to one of his competitors, but that the latter, afraid of being accused of conspiring to restrain trade, refused to come to his office.

The export lumber business was so badly demoralized, prices were so low, mills were shut down, some operating on half time, and the price of lumber was so largely dictated by foreign cooperative combinations, that the lumbermen at length took steps to protect themselves.

Practical questions of transportation were involved. Lumber had formerly been shipped on sailing vessels carrying comparatively small cargoes. These had been supplanted by the ocean tramp, carrying from two to five million feet at a cargo. The capacity of these boats was so great that it was difficult for a single mill to fill an order without choking up its docks. The demurrage was high on these tramp steamers, and it became necessary to distribute the cargo among the various mills and to work in some sort of cooperation.

It was also found that the character of the various cargoes could be better handled by the different mills working in harmony. One mill, for instance, might have the kind of logs which would cut to advantage for a certain part of the cargo, another mill another part, and so on. In addition to that, it was believed

that by exploiting and advertising the Douglas fir lumber of the Northwest, the export business in that lumber could be largely increased. Employing advertising agencies and representatives abroad, and arranging exhibits, would lay a very heavy burden upon a single organization, and the rest of the manufacturers would share in the benefits.

The export mills, therefore, numbering some 50 or 60, formed a corporation known as the Douglas Fir Exploitation and Export Company. The stockholding was to be limited to the export mills. Each, regardless of its size, was to have an equal vote in the affairs of the corporation. The capitalization was small (\$200,000) and the corporation was to operate upon a brokerage percentage basis. It was provided that all earnings in excess of 7 per cent of the capital stock should be set aside for the purpose of advertising and extending the use of Douglas fir in other countries.

A Few Cases in Point

IT was expected that something like 70 per cent of the export mills would join in this organization. The promoters had not gone very far before timidity was shown over the Sherman Act. It was then suggested that all of the corporation's by-laws and proposed contracts and everything should be submitted to the Department of Justice, with an agreement that if in its opinion the operation of such an organization would transgress the law, the corporation would immediately cease doing business. The Department, however, very properly took the position that it could not act in an advisory capacity to a private corporation.

The corporation has, therefore, lain dormant. It is, or was a few months ago, ready to proceed. It believes, said Mr. McMicken, that it can increase the volume of export lumber. It believes also that it can get better prices for the lumber and get the profit which now goes to the middleman in Australia, South America and the Orient which should be received by our own people, with a fair profit to the logger, the mill man and the transportation company.

Turning now to agricultural implements, another witness gave a practical illustration of a kind of association which might be formed. In a certain town, next door to each other, are two companies engaged in the manufacture of plows. Those companies compete in almost every country where agricultural implements are used. If they and other manufacturers were allowed to cooperate, the expense of doing their export business could be materially reduced, and the American manufacturers would be able to meet prices that are made by those of other countries.

Take Portland cement for a further illustration. The situation in that industry was put before Congress by Mr. W. S. Mallory, president of the Edison-Portland Cement Company. Something like two years ago Mr. Mallory appeared before the Federal Trade Commission represent- (Concluded on page 40)



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OUR jaded nerve centers are constantly being jarred by additions to the list of things guaranteed to win the war. The inventory includes food, coal, ships, artillery, the will-to-conquer, etc. And the adherent of each school is right, because these things are all essential detail in the great trinity of men, materials and transportation. Through domestic and foreign commerce this same trinity must save our nation from the industrial dangers of peace reorganization.

The Business Man's War Council

At the Convention of the National Chamber of Commerce in Chicago, He Will Confer with the Nation's Leaders, Exchange Ideas, and Map His Future Plans

By T. R. SMITH

If the gravity of the problems to be faced, the urgency of the demands to be met, or the far-reaching effect of the decisions to be rendered are at all indicative, the Sixth Annual Meeting of the Chamber of Commerce of the United States will take rank as probably the most important in the history of the organization.

The meeting will be held in the Auditorium in Chicago on April 10, 11 and 12. It will be a national gathering of American business, national in a geographical sense, national in an industrial sense, national in the personnel of the delegates.

Each state will be represented. East will meet west and north will meet south. Every branch of industry, commerce and finance will send its leaders. The adjustment of business to war conditions will be the great theme of the discussions.

Never before had American business men faced problems so momentous as this war forced upon them. Men were uncertain as to how those problems should be met. They were suddenly thrust out upon a road which they never had traveled, an uncharted road, where the familiar landmarks of 30 years were invisible. Thus in the beginning there was confusion. Now, however, American industry has found its way. We are settling down and we are producing the things upon which national defense depends. Nevertheless the demand for war materials, and the danger of delay in supplying them, creates a continuing problem which acts as an incessant prod to business men, that problem, how can we produce more and ever more, how can we produce faster, faster, faster. The government must have—shall have—every ounce of productivity in the compass of American industrial power, to the end that, in the famous phrase of Lloyd George, "the sword shall not be sheathed until the purpose for which it was drawn has been accomplished."

Four questions there are of supreme importance to the nation as a whole and to each individual business man. In the correct solution of these four national problems will be found an adequate answer to the pressing perplexities that now harass and hamper the individual, and it is these four questions that will primarily be the objects to which the action of this Annual Meeting will be directed:

Government Organization in Relation to Business in War.

The Railroads.

Financing the War.

Ships

There are many to maintain that the railroads are the real crux of the present situation, that they are the arteries of the nation's life, that only in opening them to the widest extent will full circulation of commodities, credits and industrial activity be restored. Certainly the present transportation plight and the opportunities for relief opened by Government control make for a discussion that is both interesting and necessary. Steps must be taken to discover what the facilities and equipment of our railroads are to day. Whether the operation of all roads as a national unit can

increase their serviceability and efficiency. And to what extent. What additional facilities are to be needed in the years 1919 and 1920? How is the money to be raised? How are the holders of stocks and bonds to be protected?

It is along lines such as these that action may be expected at Chicago. That it will be definite, constructive and of real value is obvious in the mere statement of the projected activities.

Money for the war is beyond question an issue of paramount importance. The billions we have already raised are behind us. New billions must be provided. The third issue of bonds is already at hand. The business men of this nation are faced with tremendous possibilities.

How much lower can business permit the price of its securities to go and still be able to finance the demands for enormous productivity it is necessary for it to meet? Will the proposed Government fund of \$500,000,000 solve the problem? Or will it prove but a temporary expedient, relieving the few and multiplying the problems of the many? What of our savings banks? What of our commercial notes and their rate of interest? What new angles are here injected into the trade acceptance situation? Is our present theory of taxation basically sound? Can we follow to its logical conclusion the course we have adopted? Certain is this, that before the decision of the meeting is reached, these and kindred questions wrapped up in the great problem of raising money for the war will have been picked bone dry—and this by the ablest minds in the country.

First of All—

SHIPS, we all know, are of first importance. It matters not what armies we raise, what stores of guns, munitions and equipment we manufacture, if we have not the means of transporting them to the battlefields. Yet statements as yet uncontradicted maintain that for the past six months submarine sinkings have exceeded twice over the new tonnage launched by the United States, France and England combined. We must have ships—and at once. Are we, as individual business men in our own localities, doing our full share to help in the solution of this problem? There are things, definite, practical, concrete things for all of us to do to help. Shipments must be speeded up. Labor must be provided. Outside labor must be properly housed and made contented in its new surroundings. To all who touch the ship problem directly or indirectly—and how many there are—that part of the meeting given to the shipping problem will prove informative and suggestive.

And then, in its turn, comes mobilization of industry. In the first place—these are the things for which the National Chamber is working—centralized control of Government purchasing, and secondly the marshaling of industry by its own efforts to confer with the Government.

Last September the War Convention of American Business, held at Atlantic City

under the auspices of the Chamber of Commerce of the United States, unanimously adopted the committee system of industrial organization and voted that every industry should organize a committee of its own, representative in character, to cooperate with the government. To these committees the Government can bring its requirements and quickly receive dependable information as to how they may be met. Through these committees standardized cost and production bases are to be established by men personally familiar with the actual trade conditions in each section of the country.

Filling Uncle Sam's Orders

THESE committees aid too in the distribution and conservation of materials. They provide organized machinery to advise the Government what the needs of the industry will be, to meet the future requirements of the Government, and to bring to the attention of the Government whatever unemployed facilities may readily be adapted to the production of needed war supplies. Through these committees, rapid progress has already been made toward the standardization of production, economic distribution of raw materials, and the elimination in manufacturing lines of unnecessary sizes, styles and shapes, to the end that raw material, labor and capital may all be conserved.

More than 150 of the industries of the country have already responded to the call of the Government issued through the National Chamber by the organization of committees. The Government's approval of the Chamber's plan was expressed by Director Gifford, of the Council of National Defense: "It is most desirable that representative committees of the industries be formed by the industries themselves at the earliest moment."

An important feature of the Annual Meeting will be the special session given over to these war committees in which to match up the accomplishments thus far reached and to map out a programme for the coming months. Centralized control must become a real fact in each individual industry, a campaign of action, a road to achievement. At this meeting in Chicago much will be accomplished to make centralized control a living reality throughout the length and breadth of the land.

The speakers at the Annual Meeting cannot yet be announced. In previous years, Presidents of the United States, members of the Cabinet, the world's great leaders of commerce, industry and finance have in turn addressed the members assembled. President Wilson, Ex-president Taft, Secretary of War Baker, Secretary of the Treasury McAdoo, Lord Northcliffe, Col. Samuel McRoberts, then of The National City Bank—the list is long, the personnel one of unvarying distinction.

That the attendance at these meetings will be large goes without saying. To share in the inspiration of the meeting and take for their own the new vistas of thought and clearer conception of the tendencies of the day, is a privilege that will draw business men of all sections of the country to Chicago.

AGAIN, THE WAR GARDEN

The Patriot of the Hoe Is Being Guided by the Errors of Last Year When He Planted Not Wisely but Too Well

By J. W. E. LAWRENCE



WHEN the American people turned their energies to the raising of war gardens last spring, the demand took them unprepared. We planted gardens all right enough, and we produced on a scale so gigantic as to astonish ourselves. But it was a case of going off at half-cock. We had no time to think it out, and enthusiasm took the place of good judgment.

There will be mighty little lost motion this year. We won't over-produce here and under-produce there, and we won't grow what we can't take care of after it's grown. We know now what to look out for.

I asked Professor L. C. Corbett, of the Department of Agriculture, just what are the things that will have to be avoided in the light of last year's experience; and how the Government has gone about warning the ardent amateur gardener.

"In the main it's a question of applying one common sense rule," Professor Corbett said. "We tell every gardener: 'Determine, first, the area of land available to you and plan your garden so as to make the best possible use of this area for the purpose of meeting the needs of your household.'

"If the size of the garden is not restricted by the area of land, find out how much garden truck you need for the use of your own family, including perishable vegetables to be eaten fresh from the garden or to be dried or canned. This programme should include root crops that can be stored for winter use, such as potatoes, turnips, carrots, and the like."

"If you have more land than is necessary to supply your needs, don't—please don't—plant it also in perishable garden truck with the idea of selling it on the local market unless you have determined the method of disposal and are sure that there will be a reasonable demand for your product without unduly interfering with the legitimate operations of

established market gardeners.' If every one who has surplus land over the actual needs of his own household were to grow perishable products for the market, it is more than likely that the product would not find ready sale and the results would be waste not only of seed, labor, and good food products, but a destructive competition which would result in harm to well-established legitimate enterprises. It seems evident, therefore, that any excess area suitable for crop production over and above that actually needed for garden purposes be devoted to some of the staple crops such as corn or potatoes rather than to perishables.

"There is always a market for these staple products. That is the heart of it; and that's what was not generally realized through the nation last year. It is also needful that gardeners understand that they should estimate exactly the amount of seed they will need. Many buy seed over-abundantly. It never occurs to them that by buying in excess of their actual needs they may deprive others of a sufficient supply to maintain gardens.

About Handling Perishables

THE enormous areas that will be planted this year, not only for patriotic reasons, but because of the spur of high prices on food, is going to absorb the seed supply even if there be no waste.

"The same is true of arsenical poisons, such as Paris green, for killing bugs. A million gardeners using a quarter of a pound apiece would exhaust our national supply. Use a stick and a tin can. It takes time, but it's more patriotic. Last year, because of extraordinary conditions which existed as regards the seed supply, a special drive was made to secure a normal acreage of potatoes.

Since there may be a shortage of arsenic poisons, the little girls plucking the mandolin-backed potato bug by hand are performing a patriotic service

The acreage was obtained and in addition a yield per acre was obtained several bushels in excess of the normal, so that the aggregate crop harvested in the autumn of '17 was considerably in excess of that of recent years. This large supply coupled with adverse weather conditions during the winter and a great car shortage at digging time, as well as later, found the nation with over 17,000,000 bushels more in its potato bin on January 1, than had been there during the average of the last 5 years.

"As the weather becomes favorable, this crop if it can find transportation facilities, will undoubtedly move into the markets with tremendous rapidity, if not with flood-like proportions. This is an unfortunate situation, both from the standpoint of the consumer and the producer. If there had been abundant transportation and good weather during the winter season for shipping perishables of this character, this great staple food asset would have performed its normal function of replacing bread grains to a large extent. Such untoward conditions as have obtained this year are of course beyond the control of

either producer or consumer, but the experience of this season illustrates one of the difficulties of handling a tremendous tonnage of a perishable product which must be handled on a seasonal basis.

"The need for care to avoid the planting of more truck than we can consume directly is well illustrated in what happened last summer in Rhode Island and Connecticut. The home gardeners of those states spread themselves. In fact, they spread out over the local markets, flooded them with produce, and disturbed the legitimate and necessary business of the truck gardener to an unwarranted extent. And the same condition obtained elsewhere, too.

"How much better it would have been if those well-intentioned patriots had grown just what they needed, and devoted the balance of their productive area to corn or some other staple. We needed more corn. That would have been a very great service. It is particularly important that the business men of every community should understand this, and use their influence to safeguard the people in their efforts.

"The Agricultural Department advised against the planting of extensive gardens in the city of Washington last year. The Boy Scouts had the use of a hundred acres of land near the city. They wanted to put it in garden truck; and as it was highly productive land, it would have made an excellent garden. But the effect on the Washington market would have been very bad, and corn was really needed. So the Department suggested corn, and explained why. The result was not merely a patriotic intention but an intelligent, and patriotic service. They grew corn—lots of it, on that land.

"The experience of last season indicates that the extensive use of vacant lots for purposes other than community or individual gardens is sometimes a mistake. In general, such areas if of suitable land which can be put into good tilth, return a good harvest when used for individual or community gardens. But as truck farms in the hands of inexperienced cultivators they often prove disappointing when the financial balance is struck at the end of the year. The cost of preparing such land with the forces at hand—which should be such as do not interfere with the legitimate farm activities in the neighborhood—does not justify the results. Such land if it has not been in agricultural use for many years, even though

it is naturally of fair quality, is difficult and expensive to bring into proper condition for garden purposes, and the use of such land for gardens should be very carefully considered before it is undertaken.

"It is on record, for instance, that a small

"It is desirable that the attention of those eager to help, with money, land and labor should have their attention called to the pitfalls I have mentioned. This is a matter of education; and the Department of Agriculture is bending much energy in that direction at present."

Professor Corbett explained the machinery through which the Department is doing this work. The government has a leader or director of extension in every state. Practically each county in every state has a farm bureau organization which directs the local work. The farm bureau organization is made up of farmers acting in cooperation with one or two local government representatives. One of these is a man who acts as farm adviser, and gives direct personal help and advice to all who need it. The other, generally a woman, acts as club agent, and works among the farmers' wives and children and other women of the community. The next step will probably be the establishment of municipal agencies, to be organized, conducted and made effective as far as possible by soliciting the cooperation of local business men through chambers of commerce and similar organizations. This will involve a very direct appeal to the business men of the country.



Deep trenches in France protect our troops from shells—shallow ones in American fields must protect them from hunger. He also serves who does what he can to help his country grow food for its armies, its allies and itself.

band of patriotic business and professional men in a certain city combined last spring for cultivating certain plots. They had it all worked out—on paper. They would plant garden truck, sell the truck, and so pay for an ambulance which was to be given to the government. They did the job up brown, and paid lots of good money for labor and seed; and, when the day of reckoning came, found they had lost a good deal of money. The sad part of it is that they had bought the ambulance before putting in the garden, and had to go down into their pockets to the extent of \$1200 to square that end of the account.

has its headquarters in Washington.

"One of the big lessons learned from last year," said Mr. Pack recently when he was asked to make a statement, "is that we must make early preparations; and that it is possible, with persistence, to convert not merely individual citizens, but whole states, to the need of raising their own food.

"Take, for instance, the example of J. H. Stewart, Commissioner of Agriculture in West Virginia. He began this winter, long before the snow was off the ground in the valleys of the Alleghenies, to line up the forces of his state. He estimated (*Continued on page 34*)

A War Policy of Industrial Peace

By GEORGE FARLEY

ANCIENT Chinese tacticians held that armies should terrify the enemy by blood-curdling yells and horrible grimaces, befitting the devils which it was the business of soldiers to make themselves appear. Industrial mobilization was not then the war problem it has since become. Even when the effect sought was less psychological, and fighting was with plowshares, axes and mattocks, each man supplied his own armament and kept it in repair, carrying a file with which he sharpened his weapons when the day's work was done.

In our day we seek to reduce the enemy to a proper physical and mental state by what the official *communiques* call "artillery preparation." Instead of disfiguring our faces to frighten him, we use our big guns to disfigure his or to make his dugout uninhabitable. Hence the commanding position of industry in war. It takes more men to make a big gun than to fire one.

Hence also the necessity, manpower being at a premium, of every man working full time, a point on which the Government and public opinion are agreed. How to bring about such conditions that there will be no slackening of industrial effort, from labor troubles or otherwise, is a matter of capital concern.

The Government, as guardian of the general good, has always had an interest in labor disputes, and in late years has manifested that interest by offering its services as mediator between employers and employees. In the shifting of positions caused by our present situation, the Government finds itself the greatest beneficiary of industrial harmony and the greatest sufferer from industrial misunderstandings.

Therefore a policy intended to minimize as much as possible the danger of disagreements which might threaten or impair our strength in this war becomes of the greatest military significance. Such a policy the Government hopes to see formulated as the result of the national Labor Administration which it has created. The Secretary of Labor is the director of this administration, and he has designated an Advisory Council of six members, representing the public, employers and employees, which is now actively engaged in advising the director regarding organization, personnel and policies.

The organization at present contemplated is largely for the purpose of administering the policies which may be determined upon. There is an employment service, which is organizing a system of labor exchanges through which industries needing workers may have their requirements met. Other divisions will deal with priorities in demands for labor, labor

Carefully Prepared by Labor Experts,
This Broad Plan May Help Us Avoid Internal Disagreements That Only Strengthen the Enemy

By GEORGE FARLEY

dilution and training, maintenance of labor conditions, women in industry, and safeguarding of living conditions, housing and transportation. An important function of the Labor Administration will be the adjust-

administration; it merely suggests some points in policy which the Committee believes should be carefully weighed.

It is significant that the two points which are insisted on as of the highest importance are that there should be limits to the profits of employers and to the living expenses of employees. What the committee has to say in this regard is worth reprinting in full:

"No plan should be considered that does not first prevent excessive profits resulting from the conditions of war. As has been the experience of Great Britain, it is necessary to permit a reasonable profit to stimulate the increase of production on the part of industry. Anything in excess of that should be either prevented or taken by the government. Unless this be done, it is futile to expect that there will be regulation of wages or satisfactory industrial relations. This position has been repeatedly taken by the Chamber of Commerce of the United States. The Labor Administration itself cannot give effect to this recommendation; new legislation is required."

"The government should at the same time endeavor to prevent excessive prices which employees pay for the necessities of life. This control must extend to merchants, landlords, public utilities, and other agencies with which employees deal. It is not sufficient that it affect manufacturers' and wholesalers' prices. For this suggestion, too, new legislation is necessary, although the Labor Administration can prepare the way by assembling data."

"Control of profits and prices," the committee continues, "will establish a control of some of the causes which lead to stoppage of production. Control of other causes is the problem which will come before the committee of twelve. With respect to this control, we suggest some of our conclusions:

"It should be explicit that the control is for the period of the war, and no longer."

"For the success of this control, all the prestige and authority of the government is essential. The highest executive authority of the government, the President, should be enlisted to obtain wide and general acceptance of the control that is arranged."

"The control should deal with the question of adequate wage in such a way as to eliminate competition on a basis of wages among government agencies and among industries which are essential to the support of war. The public interest requires that an industry should not be allowed to buy away the labor needed in other industries also essential to support the war. At the same time, the labor employed in the support of war should be assured adequate wages. (Concluded on page 37)

TEN MEN

ALMOST all of them are large employers of labor. They have set forth some of the basic principles upon which peace may be maintained in our industries for the period of the war:

Henry P. Kendall, chairman, president Lewis Manufacturing Company; manager Plimpton Press.

Henry Brue, vice-president American Metal Company; formerly director of the New York Bureau of Municipal Research, and investigator of industrial, educational, and economic conditions.

Waddill Catchings, president Pratt Iron Works, Dayton, Ohio, chairman War Committee of the Chamber of Commerce of the United States.

Homer L. Ferguson, president Newport News Shipbuilding and Dry Dock Company.

Lincoln A. Filene, William Filene's Sons Company, Boston.

Ernest M. Hopkins, president Dartmouth College; formerly employment manager Curtis Publishing Company and Western Electric Company.

Charges P. Neill, manager Bureau of Information, South-eastern Railways; formerly United States Commissioner of Labor; formerly on staff of Anthracite Strike Commission.

L. A. Osborne, vice-president Westinghouse Electric and Manufacturing Company, chairman executive committee National Industrial Conference Board.

F. A. Seiberling, president Goodyear Tire and Rubber Company.

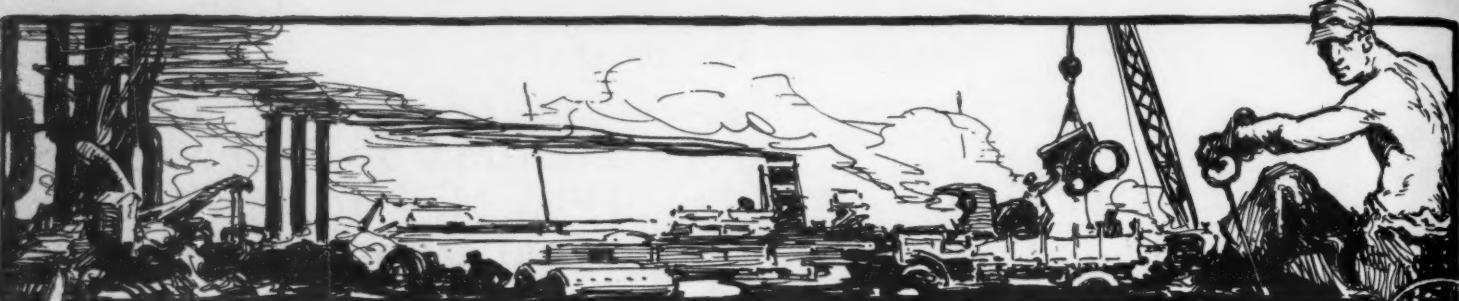
A. W. Thompson, vice-president Baltimore and Ohio Railroad Company, president American Railway Association.

ment of industrial disputes without interruption of production.

In an endeavor to agree upon policies which will receive the support of both employers and employees, a committee of twelve has been appointed, five members upon the nomination of employers and five upon the nomination of employees as represented by labor organizations. Each of these groups suggested an additional member to serve on behalf of the public.

The effectiveness of any plan will depend pretty largely upon public opinion, and therefore it is of particular interest to know the state of mind of persons who will be directly affected and who will contribute in large measure to the formation of that public opinion. It is worth while knowing, for example, what representative employers consider a satisfactory basis on which to establish industrial peace during the war.

I have before me the conclusions reached by ten men, employers almost all of them, on this question. These men constitute the Committee on Industrial Relations of the National Chamber of Commerce, and their ideas are set forth in a report approved by the Board of Directors of the Chamber. This report is not an elaborate programme of labor



Are We Doing as Much?

COMMITTEES afford means for governmental officials to get expert information, and they play a big part in every country that is at war.

In January, England published the list of the commissions and committees it has set up to deal with questions that will arise at the close of the war. There are eighty-seven of them. No less than fourteen are considering development of trade. The industries that should be deemed essential to the future safety of the nation, and the manner in which they should be sustained, the steps to be taken to recover home and foreign trade that has been lost in war, the trade that can be developed from the natural resources of different parts of the British Empire, and the future of particular trades,—such as the chemical trade, the coal trade, and shipbuilding,—are merely a few of the subjects which are being studied by this group of committees.

Finance engages the attention of another group,—the new facilities that may be needed to convert plants now engaged in war work to a basis of normal production, the source of funds with which to obtain raw materials to renew depleted stocks, and arrangements for settling commercial, banking, and financial transactions between British and enemy persons which were interrupted by the advent of war.

The supply of raw materials, provision for information of a commercial character, scientific and industrial research in a great many directions, the return of officers and men to civilian occupations, disposal of military stores that remain on hand, relations of employers and employees, are other subjects which illustrate the forehandedness, that England practices in the midst of war. There is even a special committee of lawyers who are to interpret the real meaning of the period of the war.

The problems these committees are studying are very concrete. There is the question of facilities in credit for businesses that have placed their capital in materials and special machinery for making the supplies of war. There is a different problem in devising ways to supply with raw materials the concerns that fear to proceed on their own initiative because of the danger of buying on a falling market. Whether the motor trucks now in different branches of the military service are to be placed on the general market or gradually sold to agriculturists is quite another question.

If foreign example counts for anything, we may look forward to a great expansion in our own committees.

Acres as Assets

FARM LOANS to a total of \$50,000,000 were closed under the government's scheme to the end of January. Twenty-five thousand borrowers had then obtained sums ranging from \$150 in some parts of the South to an average of

\$2000 in the Middle West. At the same time there were applications pending for loans to the amount of \$260,000,000. The cost to the government was around two per cent, in making these first loans, but is expected to fall very materially when the farm-loan scheme really gets going. Until December 1 farm-loan bonds were sold by the land-banks to a syndicate of some 112 bond houses, but the rise in the price of money led to the bond houses terminating the arrangement the first of December. The Treasury has since taken \$18,000,000 of them.

A Home Guard for British Inventions

AFTER-THE-WAR is more and more becoming a very definite period in England, through preparatory legislation. Lack of exact knowledge about the date when this new era will begin does not deter the British government from creating new safeguards of kinds it deems essential.

Cause and effect sometimes appear clearly in this legislation. For example, it has been discovered in England that subjects of enemy countries in the past have manipulated British patent laws to the detriment of British trade. Therefore, the government in November brought forward a bill which is intended to put a stop to that sort of thing. To make the relation of cause and effect more clear, perhaps, England's War Cabinet itself is supporting the bill.

Protection of British trade is the central purpose, according to official explanations. A foreign inventor is to be prevented from using British law to keep his device out of use in the United Kingdom, or from manufacturing in his own country and exporting to the United Kingdom without letting the latter have the benefit of home manufacture, or from limiting business in the United Kingdom by unreasonably refusing licenses.

A British law of 1907 was intended to effect most of these purposes. Its proved defects, from the government's point of view, are to be eliminated. If a patentee does not work his invention within four years, refuses licenses on reasonable terms, or imposes unfair conditions on use or sale, the patent may be revoked or compulsory licenses issued. The term of four years and the other provisions are made elastic through discretion of the courts.

Incidentally, a new kind of patent is created, as an experiment to encourage invention. This is a "license patent." If an inventor registers his patent in this class, anyone has a right to a license, upon fair conditions over which the courts will exercise supervision.

A war extension of the patent period has been urged by British patentees. The bill goes only so far in this direction as to authorize the courts to grant an extension of the period for patentees who prove losses that can be traced to war conditions.



With patents for food, drugs, and medical and surgical appliances, the new bill deals specially. Specifications for these patents are not to include claims for the products but only for the method or process of manufacture. Moreover, under the patents the proper official may grant licenses to anyone, fixing royalties at minimum figures in the general interest of the public.

Trade marks are a related subject, and there is a new bill regarding them, too. It begins by permitting British registry for marks which now cannot be registered but which can be protected only through legal action for unfair competition on the ground that goods are falsely palmed off as of the complainants' make or brand. Failure of England to allow registry of these marks has prevented British subjects from getting registry in some foreign countries and being in the position of seeing interlopers appropriate their brands abroad.

As to other trade marks,—the kinds that are now registered in England,—it is proposed to continue their status for four years, but at the end of that time those which are used, not as a mark to distinguish the goods of a particular manufacturer or merchant, but to obtain a perpetual monopoly of the manufacture or sale of a particular article, will be removed from the register.

The official explanation of the bill takes the position that in present law, procedure is laid down for this purpose, that it is so arranged as to be little used, and that the bill would simplify the procedure for the purpose of making it effective.

Discipline for the Cost-Plus System

COSt-PLUS in the Navy Department has had some development in the course of a year. When this basis of contracting was first used its nature was exactly indicated by the description,—the government undertook to reimburse for the actual expenditures and to pay a percentage for profit.

The later form sets an estimated cost, a lump sum for profit, and the contractor receives half of any saving he makes in the estimated cost. If the cost goes higher than the estimate the government pays the excess, but the contractor's profit does not increase. All expenditures are scrutinized by the Navy's Compensation Board at Washington, under which there is a local cost-inspection board of naval officers at each yard which is at work upon the 435 vessels that are under construction.

According to this plan the contractor solicits bids for material he needs, and places the bids before the local cost-inspection board, which approves or disapproves. For expenditures under \$10,000 the local board's approval suffices, but for larger expenditures approval must be obtained from the board at Washington.

"Costing", as the British call it, has become a highly important governmental function in these later days. By dint of much searching into other people's cost, governments themselves may in time reach the point of considering their own.

German Enthusiasm and the Timid Nettle

THE CARPET BAG, says a leather merchant who has been scanning the supplies of materials, is coming back into vogue. A commentator forthwith avows that each owner of a carpet bag might have the name of his home town woven into the fabric. Clearly, every man may soon be known by his carpet bag.

Leather is not alone in provoking substitutes. The price of cotton has stimulated British interest in the humble nettle. Gripped by a cotton famine, Germany has already waxed enthusiastic over the nettle and for two years has been using its fibre. The Berlin Association for Advancing Trade Activity even declares that the country can supply 6,000,000 metric tons, or ten times the pre-war imports of cotton and jute.

German war enthusiasm and peaceful practice may prove two very different things; for the nettle adds to its irritating characteristics a high degree of timidity. Under cultivation it shrinks and shrivels, unless every plant is nurtured with an individual care that dismays farmers even in a land where agricultural labor toils for an insignificant wage. Our South will see to it that we do not develop any great interest in nettles, and their fickle ways.

The shortage of paper in Germany may explain why our chemists are turning out these days a greater grist of scientific discussion than their former Teutonic confreres, but the tangible successes do not depend upon paper, news print or otherwise.

The story does not deal altogether with coal-tar products. Not so long ago we led the world in making silk gloves, but our gloves of other fabrics were strictly for utility and in no sense for personal adornment. England had developed a cloth glove, which the Germans induced to migrate to Saxony, and when the war came we were buying it in quantities for dress wear on the street. To-day, one can be as aristocratic as he pleases about the price he pays for American-made fabric gloves, which are proportionately releasing ocean tonnage from the carriage of skins, and he can with pride place his new gloves beside any that ever came from Saxony.

In the Midst of War—

GERMANY has been busy for two years in making plans for rehabilitation when peace comes. The whole country is said to be honey-combed with committees which are reporting upon the future (*Concluded on page 30*)

Making Box Cars Out of Minutes

New Electrical Machines Are Saving the Seconds and Helping Break the Freight Dam That Holds Up Trains and Steamers

By F. C. MYERS

Of the Society for Electrical Development, Inc.

AS logs jam in the busy spring drives, so freight jams our terminals under the flood of war conditions, backing up the waters of commerce, causing consternation and chaos throughout the national life. Then comes tangled transportation systems, jeopardizing the very life of the nation.

Peace time methods won't do; the dynamite of modern mechanical power of modern methods must be used—and quickly. As the free flow of transportation is dammed, freight is piled higher and higher, the stagnant overflow reaching back from the terminals to the very door of the manufacturer.

This article charts the course to the "key-log" of the commercial jam, and suggests a tried remedy. It lies in the installation of special electrical machinery—machinery with almost human intelligence but without human frailties—which cuts down the necessity for hand trucks and laborers. By clearing shed floors and eliminating costly operations, these ingenious machines shrink costs and save time, thereby speeding the flow of supplies and men from our terminals to the battlefield.

In the days when tobacco was currency and neighbors traded amongst themselves, the seller of goods loaded it on a wagon and hauled it to the buyer. The goods were loaded and unloaded and the principal movement of the freight was ended. As the complexity of life increased and industry began to specialize, the scope of delivery enlarged and the great transportation companies came into being. The capacity of these carriers of merchandise was sufficient under normal conditions. Under stress of war, the roads have become almost paralyzed.

Freight sheds have their floor space piled high with goods that have been awaiting attention for days and weeks and even months. Yards are blocked with cars waiting for room at the loading and unloading platforms. Streets about freight sheds are daily blocked for hours by teams and motor trucks heavily loaded. Other streets are blocked by empty trucks waiting for an opportunity to carry freight away from the sheds. The cost in time and money of these delays is enormous.

The Movement of Freight

ONE of the important considerations of freight handling is the time required to transfer freight from the trucks which deliver it to the shed, to the cars or boat; to transfer freight from one car to another at the freight transfer points, where the shipments are segregated for their final destination; and finally the movement of freight from the cars at its final destination to trucks which haul it away from the shed.

Under ordinary conditions after a car is loaded it moves without serious delay to the transfer point or final destination so that one of the vital features of facilitating freight movement is handling it rapidly at the loading sheds to get the cars under way, and again

unloading the cars promptly at destination.

The present freight movement of cars is about 1.2 miles per hour. If only 1 minute were saved for each of these 2,325,000 freight cars, 1614.5 days of 24 hours or the equivalent of 4.4 years would be gained. This would mean to the shipping public that freight will move faster and more freely without any increase in the number of cars on the lines.

And How to Speed It Up

HOW this saving is to be effected is one of the problems which faces all transportation men. At present sheds are congested by freight, roadways leading to them are clogged, and at the same time the stations themselves are so filled with men and hand trucks that workmen interfere with each other.

The surest solution of this problem is the application of some means of freight handling which will increase the capacity of each workman. The equipment is available and is doing its work wherever it has been tried. It has been shown that the capacity of one man can be increased to equal that of seven or eight.

This speeding up has cleared streets of traffic so that instead of a truck waiting for hours to unload, it unloads in a few minutes. Instead of the freight being piled on the platform it is put on a truck and immediately removed, leaving the unloading platform clear for the next load.

Not long ago a truck backed to the unloading platform of a railway terminal. The truck driver unloaded on the platform 88 pieces of freight in 26 minutes and clattered away. The next truck moved to the unloading platform. There were only 4 crates on this truck but it was 25 minutes before the space on the unloading platform was clear so that these crates could be unloaded. The unloading took 18 minutes.

In this instance the second truck lost 25 minutes and all the trucks strung out back of him lost 25 minutes. And the transportation company lost 25 minutes' use of the platform.

On a later date a truck with three cases backed up to this same platform and unloaded in a little over 2 minutes. The total weight of these cases was 4000 pounds. Instead of their being dumped out on the shed floor, they were placed on to an industrial electric truck, carried 3500 feet in 2 minutes, and unloaded directly into the freight car which was to carry them away.

Compare the time consumed in handling these two truck loads. In the first case it took 25 minutes to transfer the freight from a shed floor. In the second case 4000 pounds of freight was unloaded from a truck and put in the car in less than 5 minutes. It is hard to imagine congestion on a platform where material is handled in this rapid fashion.

At a transfer point where freight is received by boat and transferred to cars, a careful account was kept of four operations. The

first operation with a hand truck, 1 man handled 5303 pounds per hour; with an electric truck, 1 man handled 7233 pounds—an increase per man of 36 per cent.

In the second case freight was taken from the floor of the shed with hand trucks and stowed in vessel. One man with a hand truck handled on the average of 2196 pounds per hour and with an electric truck 1 man handled 4794 pounds per hour. The increase is 118 per cent.

With the third operation, flour was unloaded from a shed. The average amount handled by one man per hour with a hand truck was 2113 pounds, with an electric truck, 1 man handled 2849 pounds—an addition of 30 per cent and it should be mentioned in connection that the work was held back by the necessity of removing the flour from the hold of the boat. Another cargo of flour was handled by hand trucks at the rate of 4267 pounds per man, per hour, as compared with 7214 pounds per man per hour with an electric truck. This is an increase of 70 per cent.

In handling these four cargoes, in the first instance 1 hour, 50 minutes car time was saved, with a cash value of \$37.40; in the second 7 hours, 17 minutes boat time was saved, amounting to \$148.92; in the third 3 hours, 10 minutes boat time was saved, amounting to \$64.40 and in the fourth 2 hours, 48 minutes car time was saved, amounting to \$53.72. The total savings amounted to \$304.63.

Some dramatic machines have been developed for time-saving equipment. The Hullett Unloader handles ore, coal or grain at the rate of 22 tons a load. The operator sails through the air with the shovel and thus has direct control while seeing exactly what he is doing. A round trip—from the boat hold to the unloading destination and back—is completed in 50 seconds. Four of these machines have emptied a 12,000 ton vessel in 4 hours. This is faster than the boat was loaded by gravity at the head of the lakes.

That much ore will fill 240 cars of 100,000-pound capacity.

At one of the largest freight terminals in the United States, the average time of ship loading and unloading has been reduced one-half by the installation of electric freight handling equipment. Six thousand-ton boats are now handled in 72 hours, instead of 144 hours. The saving in cost of freight movement is enormous. It costs about \$300 for every day that a boat of this size lies idle. Thus three days saved means \$900. At the same time the docks and piers have had their capacity for freight practically doubled. Twice as much freight can be passed through in a year as under the old conditions.

The capacity of the boats regularly loading and unloading has been increased by 72 working days a year. If a boat makes the round trip to Europe and back in 30 days more than two trips a year are gained for each boat.

The greatest loss of time in freight move-

ment is in the handling at the shed and on platforms. It costs approximately as much to place freight in cars as it does to haul it 1000 miles.

The use of mechanical methods is the only means that is available for increasing the capacity of freight sheds. Transportation companies are turning to double deck sheds with the cars coming in at one level, and the teams at another. Freight elevators are common and escalators are available. The capacity of men lifting freight is fairly efficient to a height of five feet. Higher levels swell the cost out of all proportion to the benefits.

Perhaps the first to appreciate the demand for increased facilities were the coal handling roads. As a result, at Norfolk the Southern Railway has spent several millions of dollars in installing enormous docks to handle nothing but coal. Other lines have also invested millions to care for the vast amount of coal reaching tidewater from their territories. Notable examples are the Chesapeake & Ohio, at Norfolk, the Erie at Weehawken, and lines terminating on the Great Lakes.

Car dumpers with a capacity of forty-two cars an hour are steadily unloading. This coal is then passed to conveyors and dumped automatically into the pockets on the docks. The ocean freighter comes alongside, chutes are lowered and within a few hours the boat is steaming toward Europe.

Conditions steadily became more and more congested at wharves handling other commodities. Labor dwindled as heavier freight con-

tinued to arrive. Machines were tried and the amount that could be moved with a low investment opened the eyes of the freight handling experts. One of the largest railroads with an investment of less than \$20,000 reduced the men required to handle the freight at one shed from 165 to 118. The tonnage increased 500 tons a month in excess of what was being handled when the improved methods were installed, but the laborers remained 118 and the freight continued to move without delay. Since this experiment other freight sheds have been equipped with similar results.

Hauling with Electric Trucks

THE government has been to the fore in pushing the mechanical handling of freight at its own docks and warehouses. Progress has been all the more rapid on account of manufacturers giving precedence to government orders.

The total of money expended in these improved methods cannot be even approximated. At New Orleans a few years ago the city authorities marked the passing of the singing negro stevedores by revamping the entire freight handling and warehousing equipment at a cost of approximately \$50,000,000. As a result New Orleans is known as one of the fastest ports in the United States and the amount of material being handled is constantly increasing.

The Central of Georgia Railroad in conjunction with the Ocean Steamship Company has just

completed an ocean terminal at Savannah costing well into the millions. This is one of the leading cotton exporting and fertilizer exporting centers of the country. Cargoes are now lifted from the ships' hold by mighty power winches at the shipside, the fertilizer is conveyed by power-operated equipment and dumped into the proper bins.

Electric trucks take the cotton bales from the incoming cars direct to the boats awaiting loads or to the storage shed. The cotton is lifted from the dock floor and placed in the hold of the waiting vessel by power winches. One man on a truck replaces eight or nine with the old style push truck and the winches lift the cotton in huge bundles weighing a ton or more each.

The British Government has long recognized the need of fast terminals and has developed the docks at Halifax along this line. Investigators of modern terminal facilities, if they are fortunate enough to bear the proper credentials, get sights of amazing speed in handling war materials, which include almost everything entering into the life of the human family. Fortunately the recent catastrophe at Halifax did not destroy the new freight terminals, so that the work of keeping supplies flowing to war-stricken Europe was not interfered with seriously.

Electrical engineers do not claim that they have a patent medicine that will cure every terminal ill by one simple application. But they do know, from past accomplishments, that special attention and diagnosis to each particular case will bring out a method of treatment that will result in a permanent cure.



This Hulett unloader takes 22 tons of ore from a ship's hold at a single bite. The operator travels with the scoop which is always in sight and which he controls as easily as if it were his own hand. A round trip from hold to dump takes 50 seconds.

OUR CONGRESSIONAL RECORD

THE late Charles Dickens, when he returned home from a visit to our raw and rambunctious young republic, gave his impressions without regard to the feelings of his readers on this side of the water. They hurt all the more because there was an unofficial conviction that much of what he said was true. In spite of all this we went right ahead laughing with the immortal Pickwick and weeping copious tears at the dismal death scenes with which his works were so plentifully supplied.

Congress came in for its share of Dickens' barbed wit. And congress, like the rest of us, forgave him.

But that should not be taken to mean that anyone may attack our national legislature and come away without scars. Least of all should this impression be encouraged in members of the body. Therefore when the press recently reported that Representative Alvan T. Fuller, of Massachusetts, had so far forgotten himself as to refer to Congress as a "barnacle on the ship of state," it was incumbent upon some one to rise and reply.

Someone did. It was Mr. Dies of Texas. Said Mr. Dies:

Mr. Speaker, I ask that the Clerk read the extract from the article sent to the Clerk's desk.

The Clerk read as follows:

**CONGRESSMEN SEEK SPITTING RECORDS,
SAYS ALVAN FULLER**

Asserting that "the majority of our Congressmen are here telling stories and practicing to see who can spit the farthest, Congressman Alvan T. Fuller, of Massachusetts, the only Independent in both Houses, to-day characterized Congress as 'the most inefficient and expensive barnacle ever attached to a ship of state.'

In a letter of vigorous protest to Speaker Clark against the present system of legislative work, Fuller resigned from the Committee on Expenditures in the Interior Department, saying it hadn't met this session.

MR. DIES. Mr. Speaker, if the newspaper article which I just caused to be read by the Clerk stood singly and alone I am sure I would not take up the time of the House to comment upon it, but it has become quite the fashion in recent times for every penny paragrapher in the country to make light of the American Congress and seek to belittle it in the eyes of the country.

This belittling and aspersion has usually been from persons who knew nothing of this great legislative body or the personality of its membership. The penny paragraphs written by these anemic ink shovers, who could probably earn ten or fifteen dollars a week [laughter and applause] usually spring from brains somewhat prescribed in their limits, both as to intellectual ability and the opportunity to observe this body, but now a Member of the body itself has been found who declares the decadence of the Congress, that it is no longer a useful body in the Republic for the maintenance of the liberties of the people and the conduct of the people's business, and because I know that the penny liners and funny paragraphers will take up what a Member of this body has said and write many funny paragraphs, because there will be old, effete men and young, immature children, and some Bolsheviks, and some scattering ignorance in the country that will believe it and thus despair of the usefulness of the most popular branch of our Government.

Dickens might qualify as a foreign critic of the American Congress, but I would like to know, before we accept this new apostle of

An Intimate View of Our Law-makers as They Struggle with Problems of Statesmanship and Pause Therein To Chasten a New Member Who Makes Caustic Comment on the Business Methods of the Body

iconoclasm [laughter], what qualification he possesses that entitles him to sit in judgment upon this great body. It must be some colossal intellect; it must be some man deeply learned in the history and philosophy of the world; it must be some man who has given the world some token of his prowess who essays thus to dub the Congress of America "a lot of barnacles and spitters." [Laughter.]

When my attention was called to this arraignment of Congress by the gentleman from Massachusetts, I immediately began to inquire among the membership as to who this gentleman is who was so high and holy, so pure and mighty, that he could not sit with "a lot of spitters and barnacles."

Believe me, Mr. Speaker, I had a great deal of difficulty in finding anybody who had ever seen the gentleman. [Laughter.] But that did not prejudice me against the gentleman from Massachusetts [MR. FULLER], because he is a new Member of this House and the body is numerous, consisting of 435 Members. There are many of them whom I do not know, and that would be no reflection upon him. And so I said that I would go to the Congressional Directory and surely I would get some trace of him in there. And I did. I found he had served a term in the Massachusetts Legislature and that he was the owner of the Packard Motor Car Co., of Boston.

Then I went to the Record Clerk, and I said: "This man must have been making some speeches and protests against the decay of a great Republic in order to have come now and called attention to its decay to the American people. Surely before he told the men and women of America that this body was rotten he would come before this body and make some protest, even as Demosthenes did before the decay of the Greeks." [Laughter.] But I searched the Congressional Records in vain. I called to the pages of the Record for FULLER of Massachusetts, and the answer was silently entombed in the Records there—silence, simply that and nothing more. [Laughter.]

THEN I said, "This gentleman who despairs of the Congress surely has introduced some measures here for the relief of the people," and I went to the proper officer of the Congress to secure copies of the bills that he had introduced. I found that on January 11 of this year MR. FULLER of Massachusetts introduced a bill to establish a common-commodities commission.

The next bill was to require Members of Congress, in obedience to the false clamor of the newspapers, based on false information, to pay an excess-profits tax on their salaries. Well, now, of course we all voted for it, and nobody wants to avoid any sort of tax. The first thing we did when we made an income tax was to tax ourselves. Everyone knew that for a man who came here with no income except his salary and had to pay campaign expenses every two years and go to and from Washington, \$7,500 a year, if he were fit to be a Congressman, was as low a salary as the Government ought to give him. But we voted to tax ourselves under the provisions of the income tax. Then this gentleman introduced a bill to levy an excess-profits tax on us. I think probably they are going to do that. Let them do it.

The salary of a Congressman should never have been subjected to an excess profits tax. Who ever heard of an excess profit to a Congressman's salary [laughter], especially when he has to pay 70 cents a pound here in Washington for butter and 80 cents a dozen for eggs, against one-fourth of that amount that we paid before the war? No more foolish thing could be said than that there should be an excess-profits tax on a Congressman's salary.

I would say to my friend, MR. FULLER, in all charity that a new Member is entitled to have the mantle of charity thrown about him. We have all been new Members. [Laughter.] And it is one of the characteristics of this body of men, with all sorts of sense and all sorts of charity and common sense and horse sense, that they do not hold anything against anybody here. You can make a fool of yourself and get away with it, because they have all done it more or less when they first started. [Applause and laughter.] This is a very charitable body. And I will say further, Mr. Speaker, that the way to get along in this body, the only kind of coin that passes current here, is the coin of brains and of integrity.

Men come here worth millions and we never know it. I sat by the side of a man that afterwards became ambassador to France. He was a most excellent gentleman, and after I had served a number of terms with him and he was appointed as ambassador somebody said that he had several million dollars. I never knew it; it did not make any difference.

There is no aristocracy here except of intellect and integrity. [Applause.]

Shattered Illusion

MY friend from Massachusetts should not despair because Congress did not send a band to meet him at the station. A lot of gentlemen who come here overestimate their importance. I had a friend who came here at one time and he missed the train at Cincinnati. He thought that if he did not get here on time some of the pillars of the Republic would be missing, and so he got a special train to get him here on time. [Laughter.]

Speaking of the characteristics of Congress, why, do you know, you have not got time to be barnacles? The idea of a man being a Member of Congress and having nothing to do!

Suppose he did not read about the foundation of the Government, suppose he wanted to tinker a watch without being a watchmaker, suppose he tried to run a locomotive and never had seen a locomotive, suppose he wanted to go up in an airship before he had any experience or training. Still there are a hundred and one things he can do for his constituents—250,000 in most of our districts, on an average. The requests that are made upon us by our constituents may sound silly to the paragrapher. They may write about a breed of cattle or a breed of chickens; how to set a hen; how to grow tomatoes; they may write for a package of flower or garden seeds, but their requests upon us are as important to them as the request of some business man who wants to escape millions of excess profits.

No, Mr. Speaker, this body is not decadent, it is not a bunch of barnacles upon the ship of state, and it never will be until the people who send us here fit the description the gentleman seeks to fasten upon us. Let us hope that in the providence of God that rules the nations of the world, the citizenship whom we represent will not fall into such a state of decadency that they will send barnacles to Congress to fasten themselves upon the ship of state. [Applause.]

MR. FULLER, of Massachusetts. Mr. Speaker and Gentlemen, apparently this is my busy day. I regret I have not the oratorical ability and composure to answer the gentleman in detail. I shall hope to do so later. But I do ask that as a matter of justice my letter and just what I said shall be printed in the Record, because it has



The weird green glow that comes at night from the Bureau of Engraving and Printing at Washington is evidence of the heavy burden war has placed on the plant. By extraordinary effort, all demands have been met. On a single day recently the Bureau completed and delivered 81,498,000 pieces of stamps, bank notes, bonds, and the like.

been badly mangled here this morning. [Laughter.] Mr. Speaker, I have nothing further to say.

THIS gentleman from Colorado, finding the direct attack ineffective, employs the inverse method in attempting to limit certain sums in the Agricultural appropriations bill.

MR. THOMAS, of Colorado. Mr. President, like the Senator from New Hampshire [Mr. GALLINGER], I have tried on one or two occasions to limit the appropriations in the agricultural bill; but the only success—if success it may be called—that has thus far attended my efforts has been the adoption of every appropriation that I have opposed. Consequently, I have come to the conclusion that the only headway I can make, in view of my past experiences, toward reducing them is to advocate the bill, or to suggest their enlargement.

Now, the cow tick is a very insidious and pernicious little insect. Indeed, the cow tick seems to thrive in proportion as our appropriations to extinguish it increase. It not only holds the trenches all the time, but frequently comes over the top; and whenever that occurs we cheerfully increase the appropriation. The increase of cow ticks and the increase of appropriations to head them off are much like increasing salaries that employees may overcome the high cost of living. But the "H. C. of L." has better facilities for climbing than the salary enjoys. To keep pace with it is impossible.

Therefore, this bill should embrace something more than cow ticks. Why not make an appropriation not only for the investigation of bedticks as well as cow ticks, but also create a bureau to investigate the anatomy, the physiology, and

the habits of the flea? [Laughter.] I think it is very important, Mr. President, if we are to develop our economic productivity to the highest possible point of efficiency during the war.

MRS. WADSWORTH, of New York. These are war measures?

MRS. THOMAS. This is decidedly a war measure, and I think I can demonstrate it.

There is another standpoint from which this subject may be considered. I have said that these pestiferous insects never stop their activities. They work all the time and overtime; and, as a consequence, the activities of the individual to get rid of them, or at least to mitigate their disagreeable attention, tend to violate the eight-hour law. When a man is bitten by these insects, no matter whether he has worked eight hours or not, he must stop to relieve himself of their attentions; and that requires and expenditure of physical energy. So I am sure that we should also utilize this bill to work both ends of the line—the insects which attack crops, and those which attack those who plant and who reap them. By that means, Mr. President, we shall reach the point of complete efficiency, which some departments and bureaus would do well to imitate. I therefore suggest an increase of this appropriation, with a view to doing everything possible to win the war.

NOW, the flea is perhaps the worst of these pests, because he is superactive and his powers of locomotion are so infinitely out of proportion to all the other representatives of the insect world that in all probability if we could provide funds for the study of the little beast we might discover some way of ham-stringing him, and thus, if we can not rid ourselves of him we

could reduce his activities to the "nth" power. [Laughter.]

Moreover, they feed other parasites. I think Dean Swift once said:

And little fleas have other fleas
Upon their legs to bite 'em;
And lesser fleas have other fleas,
And so ad infinitum.

Therefore the annihilation of the little flea would necessarily annihilate those infinitely microscopic parasites which, the poet says, infest the larger insect and is infested in turn by others. So why, Mr. President, should we make several bites at the cherry?

We have the assurance of the distinguished Senator from Louisiana that the appropriations of this bill have been increased in the Senate by only \$1,115,150. What are \$1,115,000 between friends? I am surprised by the committee's exceptional conduct. I am really ashamed of this meanly modest showing. It is completely out of proportion to the magnitude of our other increases, to one of which the Senator from New Hampshire has just referred; and I have no doubt he feels, as to that increase of \$73,000,000, that the committee making it could well say with Lord Clive that it is astonished at its own moderation.

Seriously, Mr. President, we have reached and long ago passed the limit of appropriations designed to investigate and destroy certain insectivorous parasites which do very seriously interfere with the growth of plants and with the healthy increase of live stock, because we do not seem to get actual results. Whenever an item of this sort, however small and insignificant, is designed to meet, study, and, if possible, remove these little plagues, it becomes a greater source

of legislative concern and is far more deadly to the Treasury of the United States than the pest is to the thing to which it relates.

I think I can say that, without exception, if a solitary pest has been destroyed by these means, if the amount needed for continuing the study of its habits, of chasing it from its lurking places, and killing it has even been reduced in succeeding bills I ask the chairman to inform me what particular insect has been so unfortunate?

On How to Get Ships to the Ocean

THE plans used in fashioning the Universe, whether the lakes were put up against the states or the states put up against the lakes, what the plans left to human ingenuity and congressional appropriations, and why all good things begin in the east,—all enter into solving the problem of housing the workers on the ships that are to win the war.

MR. MOORE, of Pennsylvania. It seems to me that gentlemen are quarreling with somebody a little higher up than anyone on this earth. Their quarrel is with the Almighty. It was the good Lord Himself who located the oceans and the rivers just as they are and who fixed the mountains in their proper places. He did not locate the Atlantic Ocean up along the boundary lines of Wisconsin. That is true. He put Wisconsin up against the Great Lakes, just as He put Illinois against the Great Lakes; and He also erected a few barriers between the Great Lakes and the Atlantic Ocean. He left it to human ingenuity and congressional appropriations to cut out a canal or two from the Great Lakes to the Atlantic Ocean, if ships are to be built so far inland as to be gotten out to the ocean to fight the battles of the United States upon the high seas.

MR. LENROOT, of Wisconsin. If the gentleman stays here long enough, does he not think that we will get that canal?

MR. MOORE, of Pennsylvania. Yes. If the gentleman stays by me long enough we will get a canal connecting Chicago with the Atlantic Ocean.

MR. Foss, of Illinois. I would like to ask the gentleman if the states were created before the Lakes? He said the Lord put the Great Lakes up against Wisconsin.

MR. MOORE. The Lakes first, of course. If we would be wise, we would cut a waterway from Chicago to the ocean. Then we could build ships at Chicago.

MR. MADDEN, of Illinois. Well, the only ship that has been built that has gone to sea, except the one referred to by the gentleman from Washington a few moments ago, was built in Chicago.

MR. MOORE. What was the name of that ship?

MR. MADDEN. She had a name given to her after she went to sea.

MR. MOORE, of Pennsylvania. What was the draft of the ship?

MR. MADDEN. She was launched in October.

MR. MOORE, of Pennsylvania. I have asked for the name, I have asked for the draft, and I ask for the beam, but the gentleman does not know. I wish he would produce his witness.

MR. MADDEN. Does the gentleman doubt my veracity? [Laughter.]

MR. MOORE, of Pennsylvania. Not at all. But I doubt if the gentleman is seamanlike enough to tell the length, the beam, and the draft of this ship.

MR. MADDEN. I do not assume to be in the shipbuilding business. If I were, I would have to confess my ignorance.

MR. MOORE. The gentleman's maritime information is not confined to the Hennepin Canal.

MR. MADDEN. Or on account of the fog that is on the intercoastal canal.

MR. LENROOT. I wish to say to the gentleman from Pennsylvania that we have sent three ships to the ocean, and one of them is the *War Chant*, which has a tonnage of 3500.

MR. MOORE. But you sent them through an English canal?

MR. LENROOT. Yes.

MR. MOORE, of Pennsylvania. You sent them through the Welland Canal. You had no

American canal, because appropriations have not been voted to create an American water-course from the Great Lakes to the sea. I wish we had an American waterway. I want to get our ships out that way.

Gentlemen worry about the concentration of population in the East. There is the gentleman from Wisconsin [MR. STAFFORD]. Like every other good thing, he began in the East. He settled there early. Every vantage of the gentleman's ancestry, to say nothing of his posterity, began in the East. He first saw the light of day there, and then passed on west, finally locating in Wisconsin.

The gentleman was educated in Philadelphia, along the gracefully sloping banks of the River Delaware. Why, then it was pristine territory, years and years and years ago; in fact, the memory of man runneth not to the contrary when the gentleman from Wisconsin was a resident of Philadelphia and studied law above the banks of the winding Schuylkill, which empties into the noble Delaware.

MR. MADDEN. But he woke up and left. [Laughter.]

MR. MOORE. Yes; he left, but he has been kicking ever since. The influence of the Delaware since then has grown; it has grown by leaps and bounds, due to the energy of the people living along its banks; it has grown until Congress finally says, "This is our great commercial river; here shall we gather the men and the materials to build our ships, the ships that shall sustain us in war and the ships that shall carry our commerce in times of peace." That is a natural condition; you can not change it now. [Applause.]

In the Midst of War

(Concluded from page 25)

of all manner of industries in every district.

For making plans against the time of industrial reconstruction the Imperial Ministry of Economics was created in October, 1917. One of its bureaus is the Office of Imperial Commissary for Transition Economy. Beginning with power to regulate imports of foods and their distribution and working with an advisory committee that had to be heard on all matters of principle, the Commissary could require any person to give information on economic subjects and to submit to inspection all business operations and records.

The Commissary's activities have broadened until it now operates with two advisory committees, of which the more important is a council of 250 members, known as the Transition Economy Parliament. In the membership are the leading financial and commercial men. For instance, the finance committee has fifteen of the largest bankers, including eight of the chief banking magnates in Berlin.

Other committees have corresponding membership, and include committees on transport, ores of iron and manganese, non-ferrous metals, textile materials such as cotton and wool, silk, fodder, breadstuffs, meat and livestock, oils and fats, resins, hides and skins, rubber, cocoa and coffee, coal, and pyrites and phosphates.

According to present plans, the whole transition from war conditions to a peace basis is to be an affair to be managed by the government.

Meanwhile, German policies regarding immediate conditions have been undergoing changes. The shortage of raw materials early led to a policy of control over production, ranging from loose supervision to an embargo with fixed prices, but with an accompanying endeavor to keep factories of every sort in operation to one extent or another.

Prolongation of the war beyond German calculations brought difficulties in internal transportation and shortage of labor and coal. The result was that the government decided to concentrate work of each kind in a few

establishments, shutting down the remainder. Officials at first undertook to make the decisions. Sometimes they consulted representatives of industries, and sometimes they acted in haste without discussion or notice.

Hard feelings resulted, and more lately each industry has been expected to form an association which applies the government's decisions to its own members, selecting the establishments which are to close and determining upon the compensation that proprietors are to receive; for in effect the different industries are pooled. The compensation which is given cannot be a very complete solace, for when a factory is closed it is forthwith stripped of driving belts, machinery, and everything else that is needed by the concerns that are kept running.

German concentration of industry is at the same time taking some other directions than those dictated by shortage in supplies of materials, coal, and labor. Several companies have recently combined to manufacture the machines for fine cotton spinning which formerly were obtained only in England. Syndication goes apace in the metal industries and in shipping. As an encouragement for shipbuilding, additional to the undertaking by the government to absorb the costs of construction caused by war conditions, several banks have united to create the Ship Mortgage Bank of Hamburg. The idea is to build up mortgage credit based on shipping in the way it has been developed on real estate. Dutch ship mortgage banks have been prospering on German business, according to the German point of view.

Economic independence of other countries is an ideal for which Germany strives in the midst of war. The more economic independence Germany has, it is reasoned, the more advantageous will be the commercial conditions it will be able to obtain in world trade when peace has returned.

The President's War Chest

THE President's fund of \$100,000,000, voted in April by Congress for national security and defense, was in part allotted as follows:

Committee on Public Information	\$3,710,000
Food and Fuel Administration	2,655,000
Civil Service Commission	250,000
Federal Trade Commission	400,000
Shipping Board	19,281,000
War Trade Board	500,000
Alien Property Custodian	25,000
Department of Justice	275,000
Navy Department	200,000

Misery Loves Company

THE cost of living at present is a matter of real concern to our diplomatic and consular representatives in foreign countries. According to the State Department, the percentage of increase over 1916 is

Italy	65%
Spain	25%
Greece	250%
Switzerland	97%
Sweden	225%
Denmark	76%
France	57%
Holland	60%

The figure for Switzerland contains a bit of solace when one remembers that Germany has some four hundred men on its diplomatic staff at Berne.

GOVERNMENT expenditures by areas are becoming somewhat capable of summary. For instance, in the vicinity of Hampton Roads this year, it has been estimated, they will aggregate \$160,000,000.



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meet this demand. It is a tire built to perform the hardest and heaviest work

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Here is a tire that must be reckoned with, and users of motor trucks must look at it squarely.

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To be the best concern in the world to work for, and the squarest concern in the world to do business with—THE FISK IDEAL

FISK SOLID TIRES



YOU have seen the mail come daily into the office of a big concern for 15 or 20 years, and have watched it grow. You have noted that it brings few books and every year more and more pamphlets? If not, then someone has held them up at the door, for they come in a growing flood to every office in the land.

If you have kept an eye on them you have seen that they improve in value to your concern even faster than they grow in number. How do you use them? Quite likely not at all. How do you treat them? Quite likely as if they were one of your office bug-bears. A few you take home to read, and they drift into the waste basket. A few you send on to your directors, or to your heads of departments and foremen. A good many go into the office waste-basket at once. A lot of them seem too valuable to throw away, and not quite valuable enough to read, and these you throw onto a shelf and there they lie, and the pile grows, and gathers dust and looks hopeless and useless, and finally gets dumped!

Now, so far as that is a true picture of pamphlet handling methods in the office of a big concern, it is a picture of an error in judgment. No one can tell what each and every office should do with its vast incoming stream of pamphlets. Here are a few general suggestions, suggestions which would not be needed at all if every big office had a librarian who could handle skilfully and get a maximum of value out of every bit of print that came in.

Print on a gummed slip a list of all the titles of the more important persons in the whole works,—the titles and not the names of persons, because the latter change often. From a copy on your desk pencil on pamphlets as they go under your eye the numbers,—sometimes one, sometimes several,—of such departments and official positions as you wish the pamphlets to go to. A clerk gums the pasted slip to each pamphlet and on it checks the numbers to which it is to go, and sees to it that it arrives. You add notes or questions to any or all of the numbers when you pencil them on, as your judgment indicates. For example, one pamphlet on a machine-shop stock room suggests certain promising checking devices. Your pencil note on the cover says, "27 (no. you give the stock-room) RR May 1." Your clerk translates this into instructions 'o the person in question to read and report on this pamphlet before May 1.

Circulating Intelligence

FURTHER details are out of place here, though I will add that periodicals are pamphlets, and so are articles clipped from

A White List of Business Books

By JOHN COTTON DANA
How to Capitalize the Pamphlet

them. Also I will add that by a circulating device akin to that suggested, about 25 families in my native New England village have for over 75 years provided themselves with the reading of the best English and American journals and the cream of American and English books, and the village, though it has grown in all that time, is reputed to be one of New England's cleanest and richest. Into big concerns, or into little villages, intelligence percolates if it is always at hand,—and the pamphlet, plus the periodical, is to-day intelligence in an ideal form for percolation!

How to Get More Pamphlets

DO you ask where these thousands of pamphlets come from? There are many sources. Hundreds of associations of business and professional men all print occasionally,—some of them frequently. Men who do things are members and they discuss and then print a careful criticism of a new and a successful experiment.

Get on the mailing list of associations working along the lines of your business. You have a purchasing department? Join the association of purchasing agents. An accounting department? Join the organizations of accountants that publish valuable reports. Have you employment problems? Get the papers of employment managers' conferences, etc.

Can you afford to have men in charge of your business ignorant of any new things? If these pamphlets and other printed things come to him and he, in turn, is made to send them on to men concerned with the particular subject each treats of, the more is your plant speeded up by the only factor that can speed up anything.—Old General Intelligence.

How find the names of these organizations? There are several lists but no one complete list. The fullest is in the Eagle Almanac. "1600 Business Books," an index and guide to the printed matter at the Business Branch of the Newark Library, gives under the heading, Trade & Professional Associations, those found in trade directories and year books. Many trade directories give names of organizations. Other lists follow:

List of Engineering Societies of the United States and Canada; Engineering News, June 3, 1915, Hill Publishing Company, 10th Ave. at 36th St., New York.



Associations listed in *Public Affairs Information Service*, H. W. Wilson Co., 958 University Ave., New York. Price on application.
Commercial and Agricultural organizations of the U. S. Dept. of Commerce. Miscellaneous series No. 61, 1917, 15 cents.

Handbook of Societies and Learned Institutions. 1908, \$4.00. Carnegie Institute, Pittsburgh.

The largest single producer of pamphlets is the U. S. Government. It turns out about a thousand different titles or numbers each month. Many of these the manager ought to see, or arrange that they go to the person concerned.

Let a clerk familiar with your plant run through the "Monthly Catalog of U. S. Public Documents," Supt. of Doc., Washington, D. C., \$1.10 a year, and check things to be sent for. An hour's time each month. The government charges only the cost of printing.

If publications of only a few bureaus or departments are of value to you, the lists of pamphlets, etc., issued by them could be checked instead of the complete list. These bureau or department lists may be secured on application to the bureau or department.

Go to the public library and ask to see some pamphlets on whatever subject you are interested in, and you can then obtain the sources of such pamphlets for your own use.

A Wide Range of Subjects

THE few items are named below merely to give some idea of kinds of information contained in pamphlets and the very varied sources from which they come.

(The address of publisher, unless otherwise indicated, is Washington, D. C.)

Index to Specifications Issued by Navy Department for Naval Stores and Material, 1917, War Department, Provost Marshal General's Office.

Estimates of Population for the Several States and District of Columbia, for counties and for cities of over 30,000, Bureau of Census, Supt. of Documents.

Profit Sharing in the U. S., Bulletin of the U. S. Bureau of Labor Statistics, Whole No. 208. Supt. of Documents, 20 cents.

Commercial Organizations of the U. S., 1917, Bureau of Foreign and Domestic Commerce. Misc. Series No. 5. Supt. of Documents, 15 cents. Interstate, national, international, state and local associations. Field of service of associations shown by symbols.

Conversion Tables of Foreign Weights, Measures and Money with Comparisons of Prices per Pound, Yard, Gallon or Bushel in U. S. Money, with Prices per Kilo, Meter, etc., in Foreign Money, by John J. Macfarlane, Philadelphia Commercial Museum, 1913.

Patents and How to Obtain Them: A book for inventors, W. E. Coleman, 624 F St., N. W.

Cooperative Competition, by E. H. Gaunt, 1918, Stevens Press, Providence, R. I. Chapters on trade associations, open price exchanges and costs.

Here are twelve successful men preparing for still greater success

—and how the lesson they have learned is directly applicable to You!

James Leffel & Company, Springfield, Ohio, make turbine engines—good turbine engines.

Twelve men in this organization are enrolled in the Alexander Hamilton Institute. Most of them are past middle age. Included in this group are the President, Vice-President and General Manager, Treasurer, the Sales Manager, Superintendent, two department managers, a salesman, two draftsmen and two foremen.

The motive that prompted these men to enrol was the determination to better themselves—to learn how to develop their positions—to make themselves and their work just one hundred per cent worth while.

To accomplish this, for these men in their maturity of years, there was only one open course, only one way. There was only one thing to do:

To master the essentials of business—to acquire a first-hand and practical knowledge of how all business success is built—to absorb for application in their own day's work those business facts and basic fundamentals which underlie all business.

These men are acquiring valuable mental capital

These men have all progressed far along the business highway. But they realized the need for something greater than their own experience to carry them on.

The bigger the man in business, the greater the natural need to absorb more business knowledge—the stronger the desire to have actual contact with other great business minds.

No business brain can be successfully nourished without using as a feeder the best product of other more successful brains.



The function of the Alexander Hamilton Institute is to give you thru its Modern Business Course and Service the best thought and experience of hundreds of successful business men—to bring them to you in the most practical, most interesting and easily readable form for absorption in your leisure time.

ness quantity whose services are always in demand at the highest market value.

The kind of men enrolled

President of big corporations are often enrolled for the Modern Business Course and Service along with ambitious young men in their employ.

Among the 70,000 subscribers are such men as George M. Verity, President of the American Rolling Mills; E. R. Behrend, President of the Hammermill Paper Company; N. A. Hawkins, Manager of Sales, Ford Motor Company; William C. D'Arcy, President of the Associated Advertising Clubs of the World; Melville W. Mix, President of the Dodge Mfg. Company, and scores of others equally prominent.

In the Standard Oil Company 360 men are enrolled in the Alexander Hamilton Institute; in the United States Steel Corporation, 450; in the National Cash Register Company, 194; in the Pennsylvania Railroad Company, 122; in the General Electric Company, 399; and so on down the list of the biggest concerns in America.

Advisory Council

Business and educational authority of the highest standing is represented in the Advisory Council of the Institute.

This Council includes Frank A. Vanderlip, President of the National City Bank of New York; Judge E. H. Gary, head of the United States Steel Corporation; John Hays Hammond, the eminent engineer; Jeremiah W. Jenks, the statistician and economist; and Joseph French Johnson, Dean of the New York University School of Commerce.

Get further information

A careful reading of the 112-page book, "Forging Ahead In Business," will show you how you can develop yourself for bigger responsibilities the same as these twelve men in the Leffel Company are doing.

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Again, the War Garden

(Continued from page 22)

that West Virginia spent \$7,000,000 last year on food imported into the state; and he determined that that must not happen again.

"His first move was to organize a Patriotic Garden League with branches in every community of the commonwealth. Through this systematic plan which will reach down into every last village and hamlet, thousands of workers of all classes, miners, lumber cutters, mill workers, railroad employees and others, will spend some of their spare time this spring and summer in helping to feed themselves."

Other states which are not naturally given to agricultural pursuits are following suit. Nebraska began some time ago taking a census of the garden space available so as to know just how much it could count on in new land which ought to be made productive; and the record runs thus through every state from coast to coast. Each goes after its problem in its own fashion, and with an eye to its own needs.

ONE of the most striking examples of what can be done in arousing communities to this patriotic service was furnished last year at a little place 3,300 feet up in the mountains of Arizona. Here way up in the mining regions of the state the employees of the Inspiration Copper Company, numbering all nationalities, planted a total of 217 acres of "war garden." They boasted that it was the largest in the United States.

Five artesian wells were drilled to supply the water needed. Italians, Mexicans, Chinese, Indians, Finns, Swedes, Englishmen, Austrians and representatives of other lands hoed their plots of ground. Bulletins were printed in as many languages as there were nationalities and posted to inform the workers of the rules which were applied to the enterprise. A garden expert, J. R. Sandige, from the Arizona Agricultural Station, was engaged by the company to make regular visits to the gardens to instruct the gardeners, more than 70 per cent of whom had never had any experience in gardening. A war-garden market was established where the excess vegetables were sold for the gardeners without any expense to them. The double-crop system was employed so that as soon as one crop had been harvested another was started. It is highly important here to note that nothing was permitted to go to waste and that all food which could not be consumed at the time was dried, canned, or stored.

This is one example of many. Companies all over the United States encouraged and helped their employees. Many of them published in their weekly or monthly bulletins the garden lessons and other information on the subject which were furnished them by the National War Garden Commission during the entire summer.

"One of the finest examples of patriotic service from public utilities was in Denver, Colo., where the Denver Union Water Company gave free water permits to all who would convert lots into gardens. It issued 4621 permits during the season, in addition to the 30,122 paid water licenses issued in the regular way. This company established a vegetable garden department, with Prof. P. L. Clarke, principal of Berkeley School, in charge. It engaged a domestic science expert who gave lectures and demonstrations on canning, which were attended by between 5000 and 6000 women. City garden exhibits were arranged by the Denver Mothers' Congress and by a number of schools. (Concluded on page 36)

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YOU cannot expect to attract the better class of skilled workmen unless you can provide homes for them. Labor, today, has its choice of where it will work and where it will not. Besides, top-notch production depends on top-notch men—men who are satisfied and contented. A force of such men means expansion. Dissatisfied men, "floaters," inefficient workers means lower and lesser production.

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have solved the housing problem for many of America's leading industries. These houses are planned, designed, constructed and priced to meet today's conditions — when speed and economy are essential. Houses of all the year around construction—substantial, practical, attractive homes, that can be erected in the shortest possible time. Over 100 designs to meet all conditions and requirements, or our engineers and architects will work in conjunction with yours.

The low prices of Lewis Machine Cut Houses is due to absolute standardization to the most minute detail — practically all waste is eliminated — every piece cut by machinery to actual accurate measure—and because of quantity production.

24 to 48 Hour Shipments

Shipments of standard designs can be made in 24 to 48 hours, and a regular schedule maintained until

contract is completed. Each house shipped complete in a car.

Among Our Customers

Among the 1917 buyers of Lewis Machine Cut Houses who have purchased in quantity are such concerns as

The Goodyear Tire & Rubber Co.	Michigan Central Railroad
The Hercules Powder Co.	American Plate Glass Co.
The Bessemer Coal & Coke Co.	Inland Steel Co.
Eastern Michigan Power Co.	Thompson-Starrett Co.
Tennessee Copper Company	U. S. Government

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Our facilities are such that we can start immediate shipment for the building of whole towns or communities. No contract is too large for us to guarantee record-breaking time.

Wire or write for full details.

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6



It was estimated that the value of the food grown was more than \$2,000,000. Seed houses sold their packets at a reduced rate when ordered through the schools in wholesale lots.

In reporting on the work, Prof. Clarke said: "Four thousand six hundred and twenty-one lots are nearly equivalent to 332 acres, which gives some idea of the amount of new ground last season devoted to garden purposes. Besides this, probably two-thirds of the 30,122 paid water licenses provided for garden irrigation in back yards or elsewhere. Those who took pains to observe estimated that there were more than 5000 dry land gardens in Denver last summer. This was a magnificent showing and provided an immense addition to the food supply of Denver and therefore of the state and nation. With all the new ground converted to gardens last summer, it was estimated that there was still left 20,000 acres in Denver to grow weeds, breed disease and mar the beauty of the city."

The Foster, Merriam Company, of Meriden, Conn., in reporting on its garden project, worked on a tract leased for the employees, reported that "besides the material gain, the garden work promoted a fine spirit of democracy and fellowship among the men." Officers of the company and employees peeled off their coats and worked together. Each man was given a plot 50 by 100 feet, the company buying the seed and fertilizer and allowing the men to pay for them on the installment basis. At the end of the season a refusal on the tract was immediately secured for this year.

The General Electric Company, Schenectady, N. Y., divided up a tract of 60 acres of river-bottom land which had never grown anything but weeds and rank grass, and furnished these plots, each 25 by 75 feet, to its employees as they applied. More than 1500 men thus raised vegetables to supply their home tables during the summer.

The Berlin Mills Company, of Berlin, N. H., inserted paid advertisements in New England newspapers calling attention to the value of this work. At the Brown and Sharpe Manufacturing Company, Providence, R. I., more than 500 employees planted gardens, raising among other foodstuffs more than 4000 bushels of potatoes. The "mutual interest department" of the American Rolling Mill Company, Middletown, Ohio, held an exhibit and gave a large number of money prizes for the best general displays and for individual products grown in their employee's home gardens.

Prizes Are An Incentive

WINDOW displays calling attention to the importance of increased production and conservation of food give business houses the opportunity to do their added bit to help the nation and its fighters. Incentive can be given to this feature of the food campaign in

various cities and states by the awarding of prizes for the most striking or the most attractive window exhibits. Such a prize in Utah, for instance, was won by Kimball and Richards, of Salt Lake City. The campaign is nation-wide this year.

Many chambers of commerce and other trade bodies threw the weight of their influence and their active cooperation into this vital food production problem. Through committee and individual effort they succeeded in adding materially to the food supply of the nation. The nearer every place in the country comes to feeding itself, the nearer will we be to a solution of many of the hard problems of food supply and transportation which are all important in our war preparation. No other plan can do more in this direction than the war garden.

About three million war gardens were planted in the United States last year. That means probably between 100,000 and 125,000 acres. This year that amount probably will be doubled. Chicago, for example, had 33,460 gardens last year. This year it will be at least 60,000.

Since some of the most effective work along this line was done last year and will be done this year by large firms throughout the country, it is regarded as especially desirable that such firms call either on the Department of Agriculture or on Mr. Pack's organization for help and advice. Mistakes due to inexperience may in that way be largely avoided, and the most will be made of every opportunity. It is a patriotic duty not merely to plant war gardens, but to plant them intelligently, and with the utmost precaution against failure.

Rain Fortifies the Growing Wheat

(Continued from page 17)

the Children of Israel made bricks without straw under the shadow of the Pyramids. It is extremely drought resisting and averages much more to the acre than the common wheat.

Originally it was "bearded like the pard," so as largely to impair its usefulness, but experiments by a member of the faculty of one of the western state agricultural colleges produced a beardless variety that is most excellent food for both man and beast. In the irrigated regions of the Far West there is much concern over the comparatively small depths of accumulated snows in the extreme Western Ranges, thus presaging lack of water later on for irrigation purposes.

In the way of food productions it is encouraging to note that the estimates of all food annuals in the country on January 1, 1918, show a substantial increase over similar figures of twelve months ago. The fear of inflation still causes apprehension to those who

regard it as apparently one of the misfortunes inseparable from prolonged warfare. In currency it can occur only from the issue of what is known as *fiat* money or some circulating medium of exchange of similar nature. There is also the danger which may come from a credit inflation such as brought about the financial panic of 1907. Only there is a vital difference between now and then as regards the nature of our currency system.

One preventive to credit inflation will be the more equal and general absorption of coming bond issues rather than have the burden borne so largely by financial institutions as is now the case. The volume of business was seriously curtailed during the last 30 days by continuing freight congestion, heatless and coalless days at factories, and unending embargoes against every known locality between the Tropic of Cancer and the Tropic of Capricorn. There was inevitably great scarcity of goods and in trade phrase, stocks of merchandise in the hands of dealers were "all shot to pieces." Local labor disturbances breaking out unexpectedly in spots added to the constantly mounting trouble.

Milder weather has helped matters, and there is always the ages old belief that "business gets better in the spring." Prices of mercantile commodities, mostly of finished materials, continue here and there to rise, owing largely to increased labor costs. The prevailing scarcity induced by transportation difficulties gave rise to a partly prevalent, though entirely mistaken impression, that demand was as great as ever. As a matter of fact there can be no doubt that the volume of domestic business, excluding Government work, has decreased during the past six months, owing to the influence of abnormally high prices, limiting use in some lines, and to the direct and indirect effect of the war in lessening the activities of all building and development enterprises and those industries dependent upon outdoor sports.

Salaries Can't Keep Pace

SCATTERED small towns in various sections which have neither factories nor mines as their chief source of existence report some decrease in local business because salaries and wages do not keep pace with the still rising cost of living. Here and there curious features of demand tell of unexpected reactions to general economic causes. There is no expectation of a large lumber cut this year save for Government purposes. Yet there is an unceasing demand for axes and cross cut saws, because the high price of coal, and the difficulty of obtaining it, forced an unusual use of wood for fuel. There is but little building going on, yet the demand for many lines of edge tools still continues heavy, for it develops that the so-called carpenter tools are used more largely by farmers than skilled mechanics.

Hotels and restaurants in small towns and cities are generally observing Food Administration regulations and requests because of the far-reaching influence and constant persuasion of the great tribe of traveling salesmen.

The business world of both high and low degree still finds happy opportunism the most feasible course to steer. It has all sorts of advice offered it, much of it from text books, still regarded by a dwindling few as inviolable and immutable as the law of gravity and the theory of the precession of the equinoxes. What is really happening is that the average dealer is necessarily guided closely by the course of the average consumer, which course, while neither logical nor according to rule, is still very human and most natural. Men are having their clothes and shoes patched and

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Pat. May 18, 1918

mended, but eating and smoking much as of yore, save at home, where the women who do all the saving in food are buying new shoes and the latest gowns.

There are economies in plenty, as popular investments in Liberty Bonds and War Saving Stamps, and unlimited donations to war purposes all testify. There are likewise savings as bank deposits bear witness. But neither economy nor savings follow set ways nor rules and the wise merchant is he who considers the consumer and studies his ways.

Once more the story is of much business, done under all manner of handicaps and difficulties, still consciously gambling with fate, still unafraid, and in the main, still prospering.

A War Policy of Industrial Peace

(Concluded from page 23)

"The control should deal directly with questions of jurisdiction among organizations of workers, in order that this source of dispute may be eliminated.

"The arrangement for control should include provisions which will, as a matter of agreement, give assurance that awards and decisions made with reference to disputes will be accepted by all parties in interest as final and binding.

"Employees should agree that on their part there will be no strikes as means of forcing a plant to have union employees. At the same time, employers should undertake that their employees will be free to become members of such labor organizations as they may choose, and that they will not discriminate against any employee by reason of his membership in a labor organization.

"Circumstances under which existing restrictions imposed by agreement may be suspended should be set out. Thus, there should be clear indication of the circumstances which will permit employment of more apprentices than agreements allow, substitution of semi-skilled or unskilled men in places where by agreement only skilled men can ordinarily be employed, if the labor supply so warrants, and use of women. Payment of piece-rates should always be allowed where war needs require.

"Tried experience and peculiar knowledge should be considered prerequisites in appointees who are placed in executive positions in the specialized divisions of the Labor Administration. Each of these divisions will deal with questions of very real complexity and delicacy. For success of the whole Labor Administration in its very highly important undertaking, men of peculiar fitness should be sought for each of the positions which are in question.

"The success of any plans which the Labor Administration may formulate will depend upon their wide acceptance. For this reason the influence of the President should be enlisted, from the national point of view.

"The problems to be met are, however, no less local in their application than national in their interest and importance. In solving local problems commercial organizations can render very real assistance by bringing the employers of their communities together and uniting them in adhesion to the principles which have been set out above as important in any scheme of control over industrial relations. Trade organizations can perform the same kind of service among their members.

"It is believed that the President should give early consideration to conditions which may be expected to follow the close of the war when men in large numbers are released from the armed forces. As a part of the labor problem of the war, the committee would

recommend that the President create a suitable agency to formulate plans for meeting such conditions as may develop, for making provisions that will assure restoration of any limitations suspended during the war, and for making other readjustments that may be necessary when peace is restored."

The Way to Lose the War

(Continued from page 9)

employing him that the lack of such a man was holding back the shipping; and that his equal for the job could not be found anywhere else in the country.

Another Chamber started a school for ship workers as soon as it became clear that the training of green help was taking up the time of foremen which would otherwise be used upon ships.

So much for the vital facts. They all point to one conclusion that cannot be understood too clearly.—Helping to build more ships is the most important war job at this time. The man or organization that successfully helps in this, is doing a job which at this time is more important than that of the man with the gun. We older business men are most fortunate that this great opportunity has come to us. Let us make all our other business secondary to it. Let us get onto our real job.

Schooled in the mart and office, day by day,
In ways of serving best his fellow man;
Counting success but in his power to make
Improved commodities, promote the
better plan:
America's son wakes to his country's
call,
Bringing his ablest weapon, the keen
curves
Of power and zeal to serve
the highest good,
And finds his glory that,
through him, his country
serves!



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BUSINESS conditions being what they are, you must expect to make certain readjustments before long. To help in this process and without accepting fees, we maintain a representative in every territorial district, engaged upon System Service.

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Our men know how to simplify methods that have become complex, how to work up useful records about your business, how to combine records, eliminating the non-essentials, how to put records into the most



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Attach this coupon to your letterhead and mail to the "Y and E" store in your city or to headquarters at Rochester.

convenient form to handle, how to establish accuracy; and they can give you first-hand information about new devices that can save time and work in your office. This knowledge, with your own, assures best possible results in handling many of the wartime problems.

Our Service dates back for a period of over twelve years, and is being used by such well-known concerns as: Western Union Tel. Co., Edison Storage Battery Co., Standard Oil; Southern Pacific Railway Co.; Western Electric Co.; Westinghouse Electric and Mfg. Co.; Pierce Arrow Motor Co.;

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From Dept. P

Mercury
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4110 So. Halsted Street
CHICAGO U. S. A.

Will They Get Wheat?

(Continued from page 13)

i. e., the grain retained on the farms by the growers. Here we have no figures of any kind to guide us. However, there are certain facts that may illuminate even this situation somewhat.

In the first place, the prohibition of vodka has, according to all Russian authorities, increased the consumption of cereal food; as it set free for bread purchase a certain amount of money previously spent for drink. Also, it is notorious that the Russian peasant is a very large eater, and what would be more natural when difficulties of transportation made the selling of his grain difficult than that he should eat more of it than ordinarily. The Russian consumption of cereals would be also necessarily increased by the mobilization. If altogether twenty million men were mobilized, as best authority indicates, the requirements of cereals for these men would be increased by about one-half, which means the using up of no mean quantity.

ANOTHER fact of much suggestiveness is that the number of horses, cattle, sheep, goats and pigs all actually increased in European Russia as between 1914 and 1916. The increase varied from but 11% in horses to 90% in goats. But the most important increases were those of cattle by 29% and swine by 34%, because the absolute numbers of these animals are very large. There is little doubt that these increases of farm animals have been largely effected at the expense of the invisible grain supply, *i. e.*, the stock on the farms. But, this animal increase will mean something in the way of meat for Germany.

Finally, it will be of interest to give some attention to the figures of Russia's normal grain production, consumption and export. According to the Statistical Notes for March, 1917, of the International Institute of Agriculture, the annual consumption per head in European Russia (48 governments) of the five cereals, wheat, rye, barley, oats and corn, taking into account food use, feed use, industrial use, and seed, has averaged for the five years 1911 to 1915, 542,896,000 quintals. This amounts to fully eighty per cent of the production during the same period, so that Russia has only had about twenty per cent of its normal crop available for export. In 1916 the crop was but 616,483,000 quintals, or an excess of but thirteen and one-half per cent over normal consumption. But consumption in 1916 was not normal. It was increased by the additional amount needed for the 20,000,000 mobilized men. If this increase is put at a pound of bread a day, including waste, it wipes out half the surplus at one blow. The remaining half of the surplus can easily have gone for the feeding of animals and the increased eating by the peasants themselves, unable to dispose of their grain because of the break-down in transportation.

Altogether then, what light we have on the situation in Russia offers little encouragement of Germany's hopes—if she really has them—for any immediate large relief from her long hunger on the basis of a resumption of economic relations with the Ukraine. However, that Germany can arrange matters, if the new Ukrainian republic has a not too exciting career during the coming year, so that she will get some wheat and rye and other cereals out of the Kazan fields at next harvest time, and more in 1919, I have no doubt. But that she will be able to increase her present bread ration on a basis of the Ukraine's present grain reserves, I do not believe. For I do

not believe that the Ukraine has any grain reserves—certainly no considerable ones. And yet,—let us indulge no happy illusions. The Russian catastrophe is a catastrophe for all of us. It breaks the blockade of Germany.

Beef and the Banker

(Continued from page 12)

to reduce the rate of interest to the borrower and place the cattle loan upon a basis comparable in public favor to commercial paper.

While many of the applications for large loans come direct to the livestock banks or cattle loan companies, cattle loans are for the most part made in the ordinary course of business by the country banker acting alone or for his bank.

The process of making the loan is simple and intended to safeguard alike the interests of all concerned. The borrower makes a property statement and executes a note and chattel mortgage covering the cattle and running to the banker, who, while personally knowing his customer, verifies all statements, inspects the animals and sees that the facilities are adequate for feeding, watering and caring for the stock throughout the life of the loan.

If the situation warrants and the maturity date of the note admits, the local banker may hold this paper in his own note case as secondary reserve. If his be a member bank, he may rediscount the note to the Federal Reserve Bank of his district. If his bank is not a member of the Federal Reserve system, he may sell the note to a city correspondent or a cattle loan company. If sold or rediscounted the note and chattel mortgage are endorsed and assigned by the bank or banker, whose property statement also accompanies the loan. When the note is taken by the cattle loan company, its inspectors inspect the security and the conditions surrounding it.

The cattle loan company acts as a broker and through its various connections places the paper with city banks or the investing public, using much the same methods as mortgage loan or commercial paper houses.

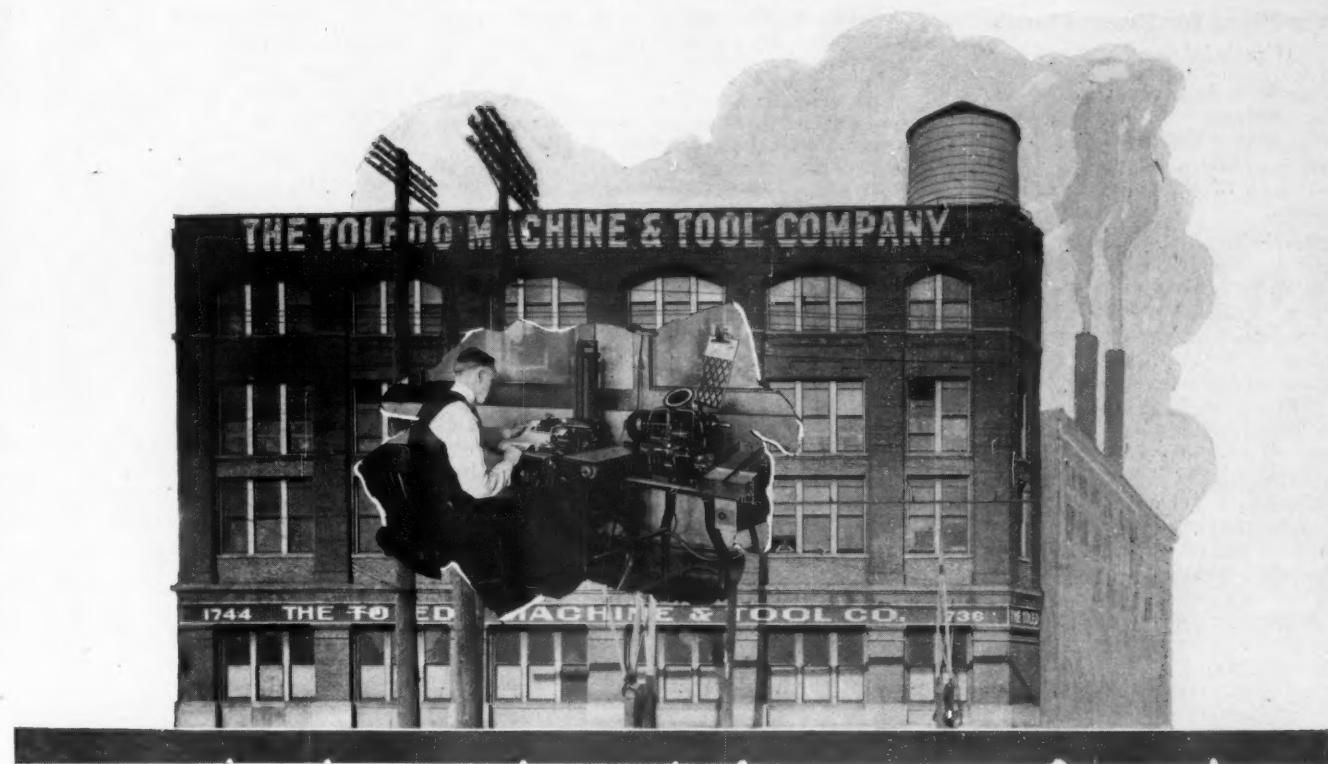
BEHIND paper so acquired the ultimate purchaser has as security the livestock—a life necessity for which there is at all times a cash market—the financial and moral responsibility of the stockman, the guarantee of the local banker and the endorsement of the cattle loan company.

Careful scrutiny should be exercised in buying, and particular consideration given the ability, experience, character and responsibility of the institution or individual making the offering. As in the purchase of commercial paper the investor depends in large measure upon the responsibility and judgment of the broker, so in buying cattle paper too much regard cannot be given the reliability of the maker, broker or cattle loan company.

Livestock puts fertility into the soil as well as money in the bank. Those communities which rest upon a livestock basis are on a sound foundation and for the most part prosperous. Livestock means a richer soil, a more productive land, better farms, better homes, a happier and more contented rural life.

Already foreign agents are seeking out in this country high types of breeding animals with which they hope to restock the fields of Europe. Our allies need our meat products to-day—every pound they can get and many more. After the war all Europe will afford opportunity for our export trade.

The encouragement of the livestock industry is a sound economic policy in times of peace. Under the stress of present needs it has become a patriotic duty.



More Paydays—but Less Work

EVERY week there is a payday at the Toledo Machine and Tool Company.

Formerly payday came only twice a month, but when they put the Addressograph in their system they found it speeded up the payroll work so much that they could pay every week and still have spare time a plenty to devote to other matters.

A young man who helps on the work, runs the payroll sheets through the Addressograph, listing the name, clock number and rate of each employee. A whole sheet can be run off in less than a minute.

Then he runs the 900 clock cards through, printing at a fast rate the large clock number and the proper name on each card. Also the name, date and number are placed on the pay checks in this same way.

While Addressograph speed cannot be compared with the old handwriting method once used in filling out all these forms, still another item of real importance is the absolute accuracy of the machine. Impossible for it to make any mistake in spelling, punctuation or figures.

Pays for itself quickly in short-cutting on payroll work. But in addition it is applied by thousands of Addressograph users in mailing work, heading up statements, addressing tags in the shipping room, filling in letters, and so on.

There are hand machines for small payroll lists down to 75 names. The Toledo Machine & Tool Company, with a list of 900 employees, has a complete motor-driven equipment. In every payroll system, whether the list is 75 or 75,000, the Addressograph will be a saving proposition.

Information as to how this appliance can be especially adapted to your work will be gladly sent without obligation. State total number of employees.

The **Addressograph**^{Co.}
TRADE MARK
PRINTS FROM TYPE

Branches in Principal Cities

902 W. Van Buren St., Chicago

War Plans for Peace Plants

(Concluded from page 10)

fuel, so there is but one remedy, *i. e.*, to limit the production of non-war industries sufficiently to provide for:

War needs—direct and indirect.

Necessities for the public welfare and domestic consumption.

In accomplishing the desired end, it should be our effort to divert the energies of non-war industries as far as possible to the production of the essentials for war, that each industrial center may use existing facilities, with its labor living at home, happy and contented.

In the readjustment process, it is inevitable that the normal business of some industries must be interfered with in order that the production of war and public necessities be kept at the maximum. It may be that some plants, because of lack of power, shortage of labor, raw materials, or transportation, may have to suspend entirely. These sacrifices must be endured in the interest of our first object, which is to win the war. If we secure complete cooperation between government and business, it is hoped that our industries may emerge from the disturbed condition caused by the war, intact and strong for the economic problems which must face us.

Duty of War Industries Board

IT would seem to be the immediate duty of the War Industries Board:

To list, by classes or otherwise, and to define those industries whose operation as a war measure are of exceptional importance, classifying them as far as practicable in the order of their relative urgency, measured by the extent of their contribution, directly or indirectly, toward winning the war.

To consider carefully, and after due notice and

hearings, to determine what are the less important industries, measured by the extent of their contribution, directly or indirectly, toward winning the war.

To promulgate such findings and to prepare, present and if practicable, enforce such definite and concrete plan or plans as will result in stimulating the operation of industries of exceptional importance; curtailing the operation of the less important industries, or in the alternative encouraging such industries so to change their operations as to produce war needs; conserving the supply of essential raw materials as reserves to be drawn upon to meet the war requirements.

A Boost for Little Business

(Concluded from page 18)

ing the smaller cement manufacturers located adjacent to the Atlantic coast, and submitted a proposition for their cooperation in export trade. The Commission, however, was unable to give him any decision.

There are twenty-two cement manufacturers in the district referred to. Three of them are large enough to develop export business for themselves, but the others, nineteen in number, are too small, individually, to handle the export business as it ought to be handled. As the result of several conferences, despite the fear of the anti-trust laws, eleven of the nineteen smaller companies decided to form an export association. Articles of incorporation were adopted and each of the eleven companies signed, two of them having decided after all that it was unwise for them to go ahead until some action had been taken by Congress to permit cooperation in export business. At the time Mr. Mallory submitted his statement, these manufacturers were ready to proceed; they had their managers selected, as well as some of their salesmen.

The plan is to form the Portland Cement Export Company, which is to be a selling company, selling for export business only. Each one of the member companies will subscribe for a pro rata amount of stock based on its shipments for the three previous years and whatever sales are made will be prorated among the companies in proportion to their subscription. The company will have no relation whatever to domestic business.

The thousands of small cotton manufacturers of the country who suffer greatly at times on account of congested domestic markets, under this bill could form companies to advertise and sell their products in foreign markets. Many of these manufacturing companies are too small to bear, single handed, the expense of maintaining their own selling agents abroad and properly advertise their products. This bill would make it possible for a number of them to combine their efforts and each contribute its share of the expense.

Waiting for Congress to Say the Word

THE bill which I introduced in the House on June 28, 1916, during the sixty-fourth Congress, passed the House on September 2, 1916, but was not acted on by the Senate. I again introduced it in the House at the beginning of the sixty-fifth Congress, on April 9, 1917. It again passed the House, on June 13, 1917, and on December 12, 1917, passed the Senate with some minor amendments.

That the business world of America has been waiting for some such law is evidenced by the examples which I have already given and by other testimony submitted to the committees of both the House and the Senate. One attorney, for instance, stated that he had on his desk the plans for four or five such associations, all comparatively small interests, which would perhaps be availed of if the bill became law.

The fear has been expressed that if we permit business men to combine in export trade they will come together at "dinners" and so forth and enter into gentlemen's agreements to fix the price in the domestic market. I think we have so hedged about the associations to be formed under this law that, as I said in the beginning, there will be no assault on the domestic pantry.

Roads

(Continued from page 16)

democracy. Roughly, at pre-war prices, it would call for an outlay of something like \$30,000,000,000; at present prices, from \$45,000,000,000 to (according to the rate which some states are preparing to pay this year) \$70,000,000,000. For what it costs us to improve 11½ per cent of our roadways, and some of that "improved" with a top layer of sand and clay, England could rebuild the whole of her highway system of 150,000 miles.

Before the war we had set the pace of constructing about 15,000 miles of first-class highways a year, at a cost of approximately \$200,000,000, and spent about \$100,000,000 more annually in the work of maintenance. During the past 12 years our estimated outlay for construction has been \$2,000,000,000, or more than \$100 for each family in the country.

Wholesale reconstruction is not necessary to meet the exigencies of the present situation. Military highways are not important here in the sense that they are, for example, in France, where roads have to be built as feeders for an entrenched army, and new highways are hurriedly constructed because the old ones have come within range of the enemy's guns.

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No American roadway, unless the Germans should decide to try their luck over here, will be put to such a test as one of the magnificent Verdun roads lived through during the attack there—a continuous stream of 5000 motor trucks day and night.

At the same time, there is a great deal of construction (and maintenance as a matter of course) which cannot be neglected without imperiling the United States and its allies. Looking on even the brightest side of the railroad situation, it is clear that we shall have to avail ourselves of the assistance of our highways and motor trucks to a greater degree during the war.

Many American roads are the death of trucks. An investigation of motor express routes by the Highways Transport Committee of the Council of National Defense demonstrates the tremendous "lift" which trucks can give to the railroads and the need of better roads in many places if we are to reap the benefit which trucks are capable of rendering. Twenty-two of these routes radiate from Baltimore. Maryland has some fine roads, also its quota of poor ones. One of the routes lies over a poor road, which has jolted the truck into the repair shop and its owner into a despairing determination to sell his equipment and quit.

Our "dirt" roads, however, are not hopeless. One of the best-informed good roads advocates that I know tells me that practically all the roads of America can be used—*can* be used—for heavy traffic in a pinch except in the worst

weather conditions, that is, used most of the time. The owner of a fleet of 45 trucks says that, with the exception of certain kinds of clay, or deep sand, a dirt road is capable of carrying heavy traffic provided it receives reasonable care. A highway in New Jersey, subjected to unusually severe usage on account of the war, became impassable, but dragging quickly "put it on its feet" again.

After the War—What?

PATCHING up and making our highways serve during the war disposes of only the first phase of our great problem. Authorities say, and events corroborate them, that a large proportion of our \$2,000,000,000 worth of good roads will have to be scrapped. They were built for another day and generation and for conditions which have passed away. We must be prepared not only to replace many of them, but in future to build better ones than we have in the past. Road building in America must keep pace with new conditions.

That is the story of roads, the story of man's desire to be somewhere else, of his changing environment, his multiplying needs, his searchings for knowledge and wealth and pleasure, his quarrels and his rapacity, his mercy and his pioneering, his greatness and his littleness. Every step of his progress and his retrogression can be traced, from the first path beaten through the forest by his bare feet, over the mighty highways which pushed the power of Rome into the four corners of the earth, and which were destroyed, some of them, as in parts of Britain, once that power was broken, for the materials that composed them, down to the great roads of France which help to-day to hold the Germans in check.

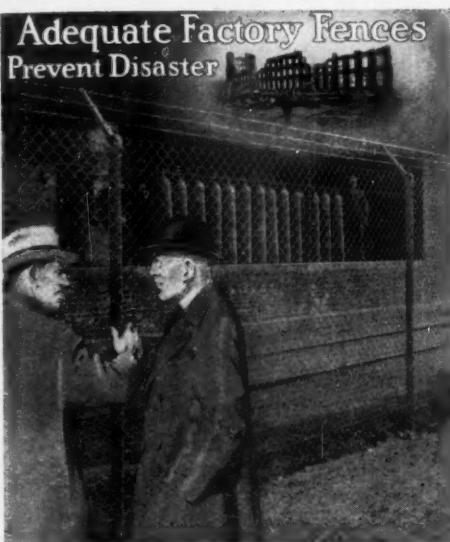
The expanding life and commerce of the United States, our boundless opportunities, the new role we are to play among the nations of the earth, call for their proper expression in the roads we build in future. Roads which shall be more than merely passable. Connected roads, so that our highways shall not be, as once they were and still are to some extent—result of 31,000 separate, independent jurisdictions—"a mighty maze and all without a plan."

PERHAPS while thinking of the large amounts of capital which must go into railroad expansion after the war we ought to be thinking also of maintaining some sort of balance between railway and highway development.

That balance, apparently, was lost in the fervor with which the country threw itself into railroad construction in the beginning. We had no more than fairly started on the building of good highways when the railroad came to divert a tremendous amount of our activities into new channels.

The need of roads developed slowly in America. England's laws discouraged trade among the colonies, and fighting with Indians required little in the way of military roads. Our highways then were largely trails, and trails they remained for a long time after we achieved independence—mere passages for settlers from one waterway to another. The birth and the expansion of commerce demanded better highways. Jefferson gave impetus to the movement by building a national pike from Cumberland, Maryland, to the west. States set up road commissions and furnished funds to build hundreds of miles of trunk line highways.

Settlers pushed out to the frontiers and beyond, set up new frontiers, and then beyond them. Thousands upon thousands of miles of highway to provide. And the settlers were



The New York World states that during the first nine months of the war American industries contributing to war needs have suffered losses totaling more than \$50,000,000 from fires of known incendiary or suspicious origin.

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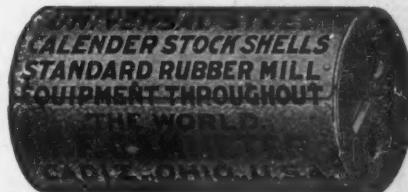


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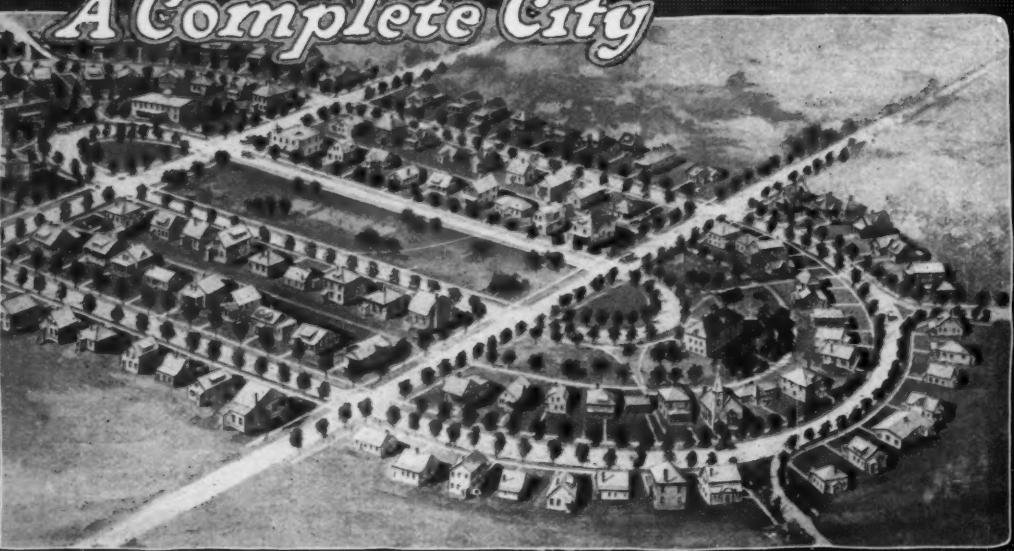
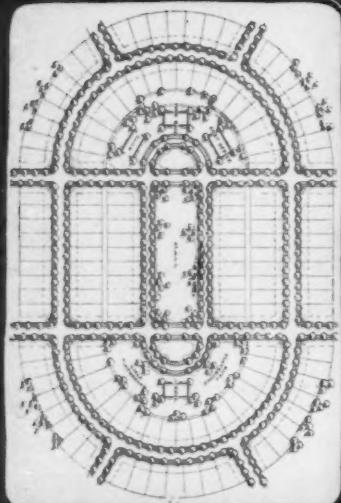
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poor. The task looked enormous—hopeless. Besides, the railroad was coming, the highway of the future. Railroads absorbed to a large extent the capital of the country. States, counties and cities sold bonds to build railroads, paid high rates of interest, and drove other securities, highway construction bonds frequently, out of the market. State aid in road building began to be withdrawn and state highway commissions to pass out of existence, as in Kentucky in 1838.

Because with all we did we did not do enough, or because railroads have been regulated to the point of exhaustion or were not always skilfully managed in the past (one can choose from three popular opinions) the railroads so far have not been able to move the freight of the country in this crisis. The view advanced that the commerce of the country will grow to such proportions that we shall be unable to provide railroad facilities sufficient to carry it, and that it will be necessary to build permanent highways paralleling the main trunk line railways, may be a view colored by enthusiasm for good roads.

AT any rate a great deal of our freight will henceforth be hauled by motor trucks. They render a service which railroads cannot render, and on short hauls, where house-to-house deliveries and saving of time are important considerations, they apparently have entered the field to remain.

All authorities agree that, with thousands of trucks running over our roads, very few of even our better highways, except those recently rebuilt to meet such conditions, will endure. States in which automobile traffic has outstripped the imagination of the road builders of but a few years ago are reconstructing highways to meet the heavier demands of

to-day. Massachusetts, which stands in the front rank as a road builder, has had to replace some of her good highways because their foundations would not support "modern" traffic. Roads and curves have to be made wider and drainage structures and bridges stronger. England faces a somewhat similar situation. She must repair the damage wrought by wider use of trucks since the beginning of the war and prepare for the still greater expansion of their use which is anticipated after the war. Canada, with a vision of motor transportation in the future, is beginning to provide highways to accommodate it.

Under the law by which the Government aids in road building we are at this late day working out a national highway policy which may revolutionize road construction in the United States and put an end to the hit-and-miss methods which have all too frequently resulted in extravagance, inferior roadways and disconnected highways. In order to take advantage of the law, which all of the states have signified their intention of doing, roads must be of substantial character, built under skilled supervision, of tested materials, types and methods of construction, and they must be maintained. Moreover, there is to be correlation of highways. In other words, a community which wants Government aid must, under the constant eye of the Government, build the right of road at the right price and provide for its maintenance.

America, road builder, still has a great task before her, an unending task. Highway construction is one of the first expressions of civilization and its neglect one of the first signs of approaching national senility. Vigor and growth are linked to transportation, and transportation (land transportation) is tied to railways and highways. The highways could stand without the railroads, but the railroads could not stand without the highways.

A "War Cyclopedic" has been issued by the government. It contains some 300 pages of concise, indexed information on the Great War. It may be obtained from the Committee on Public Information, 10 Jackson Place, Washington, for 25 cents.

What Congress Is Doing

(Continued from page 16)

when deposits are withdrawn for investment in government bonds. The Senate decided that building and loan associations, with their two billion dollars of assets invested in real estate mortgages, are in a like position, and permitted them to borrow from the corporation. A question then arose about life insurance companies and fire insurance companies, and it was decided that, if they have made loans to enterprises important for war, they might obtain advances from the corporation on the same terms as banks that are in a like position.

How far the war finance corporation will attempt to support the market for government loans, now or in the future, remains to be seen. Germany is concerned about the market that will prevail for her loans when war ends. German holders are then expected to put their bonds on the market in large quantities in order to obtain funds with which to buy materials, machinery, and the other necessities of rehabilitation. In order to absorb these offerings and maintain the market, a syndicate of banks has been formed. If this syndicate ever gets into operation, it will be interesting to observe how much farther these banks, already "stretched" beyond all earlier experience, can go in financial sword-swallowing without fatal disaster.

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The House Committee redrafted the war-finance bill in many respects. It cut in half the quantity of bonds the corporation may issue, limited the advances it may make to banks on account of their loans to war enterprises to the loans placed since we went to war, and hedged around with limitations many of the broad provisions of the bill, such as the direct loans that may be made and the interest which the corporation is to charge, which is to be one per cent over the discount rate of Reserve Banks for ninety-day paper. It likewise placed a partial restriction upon the Federal Reserve notes that may be issued against paper secured by the corporation's bonds, by compelling a member bank offering such paper for rediscount at a Reserve Bank to show that it has not sufficient commercial paper to offer in order to meet its requirements.

Licensing Capital Issues

AGAINST compulsory licensing for issues that are to be offered to the public all manner of objection was made in the Senate. Eventually, the Senate decided that licensing should be voluntary. In other words, according to the Senate there is to be a Capital Issues Committee,—possibly a continuation of the present committee of three members of the Federal Reserve Board, with an addition of two new members. Regarding each proposed issue exceeding \$100,000 the committee will have authority to make a finding as to whether or not it is compatible with the public interest. The appointment of this committee the Senate gave to the President, with confirmation by the Senate.

This voluntary licensing,—*i. e.*, licensing without statutory penalties for persons who fail to follow the advice of the licensing committee,—will be similar to England's control which began when the London Stock Exchange reopened in January, 1915. The effects of control upon issues in England can be tabulated about as follows, with a comparison for a year before the war:

	1916	1913
British government loans	\$2,700,000,000	
Colonial government loans	30,000,000	\$130,000,000
Colonial corporations		70,000,000
India and colonial loans		70,000,000
Foreign government loans	75,000,000	130,000,000
Foreign corporations		30,000,000
Foreign railways	1,500,000	80,000,000
American railways		50,000,000
British municipal loans	2,400,000	4,500,000
British railways	8,000,000	5,000,000
Electric light, power, telephone, graph	500,000	30,000,000
Tramway and omnibus		20,000,000
Gas and water	80,000	2,000,000
Mining companies	100,000	15,000,000
Exploration and financial		35,000,000
Breweries and distilleries		100,000
Merchants, etc.	500,000	2,000,000
Manufacturing	7,000,000	50,000,000
Stores and trading		11,000,000
Estate and lands		20,000,000
Rubber	80,000	6,000,000
Oil	7,000,000	26,000,000
Iron, coal, steel, etc.	6,000,000	32,000,000
Motors	1,900,000	7,000,000
Hotels, theaters, etc.	35,000	2,500,000
Patents	130,000	11,000,000
Docks and shipping	4,000,000	17,000,000
Banks and insurance	1,300,000	32,000,000
Miscellaneous	6,000,000	60,000,000

Foreign Exchange

AMERICAN importers from some neutral countries have had to meet extra expense because in these countries the dollar has been at a discount. In order to give importers a means of endeavoring to avoid additional expense from this source, the Senate provided that bonds of the war finance corporation payable in foreign money should be sold to importers at par. These bonds importers could then offer to their foreign customers or they might employ them as collateral for loans abroad. Usefulness of such bonds will depend upon the readiness of foreign sellers and banks to take them.

With the international movement of gold closely controlled during war, with the export and import of goods themselves greatly limited to save tonnage, to enforce the blockade of the enemy, and for other reasons, and with arbitrage operations in exchange prohibited in some foreign money markets until peace has returned, the ordinary means of influencing adverse rates are no longer available. To an extent agreements among nations have taken the place of former devices. A simple form of these arrangements appears in the recent agreement between the United States and Argentina by which American importers who have to make payment in Buenos Aires to Argentine merchants may, upon adding a certain fee to meet expenses, make payment in American money to the Argentine Ambassador, who in turn deposits with the Federal Reserve Bank of New York, and at the same time a corresponding credit is made available at Buenos Aires for meeting the obligation in question. Argentina agrees not to ship gold on account of these arrangements from the United States until the treaty of peace has been ratified.

Apparently believing that questions of foreign exchange should be dealt with in another way, the chairman of the Senate Committee on Banking and Currency has introduced a bill for a foreign exchange bank, like reserve banks in its powers to issue currency and taking over from them the powers conferred by existing law to open accounts abroad, deal in exchange, and the like. Hearings may be held on this bill in the near future.

Housing for War Workers

ON the first of March the President signed the bill which makes available to the Emergency Fleet Corporation \$50,000,000 for providing housing accommodations at shipyards. The Corporation can itself acquire lands and houses, by condemnation if necessary, or it can make loans to persons who will undertake to provide the accommodations.

The Fleet Corporation had some plans ready when the appropriation became available. Housing projects are not to be undertaken where increased transportation facilities can be made to afford relief. Where this solution of the problem is not possible, housing is important. For example, at Sparrows Point, Maryland, additional housing for 3500 men is estimated to mean an extra annual output of 75,000 tons of vessels. The demand for houses at shipyards has by no means reached its maximum. In January about 180,000 men were employed at the yards; when all the plants are working at capacity there will probably be 300,000.

An appropriation of \$50,000,000 for housing at other plants than shipyards was recommended on February 28 to the House of Representatives by its Committee on Public Buildings. These projects would be under the supervision of the Secretary of Labor.

Contract Profits

IN passing the first of these two bills Congress showed considerable interest in control of profits under contracts. It required that if any of the money was spent on cost-plus contracts, there should be an estimated cost determined by the Fleet Corporation and a provision that upon any increase in actual cost over the estimate the percentage of profit is to decrease at a rate to be set by the Fleet Corporation. As this subject may later come before Congress in different connections, a summary of the methods that have been used in England has some interest. These are the methods of dealing directly with profits in connection with work for the government, and are

additional to the taxes on profits which as a rule amount to 80% on the excess over the rate earned before the war, with a quarter of the remainder taken by the "normal" income tax and some of the balance paid over because of supertaxes.

Domestic Coal Trade

THE price of coal at the mine has been regulated in England so as not to exceed by more than a certain sum the price in 1913-1914. The profit made by wholesale and retail dealers is limited to a fixed sum over the average price they pay for coal. The arrangement between the British government and coal operators provides generally for an additional assessment of 15% on the excess profits,—*i. e.* over the rate in the pre-war period,—subject to a guarantee from the government for the less prosperous mines of their pre-war profits.

Ships

NINETY per cent of the British mercantile marine is under requisition on terms which have resulted in a progressive diminution in shipowners' profits. The basis of contracts let by the government for building standardized ships is cost plus a fixed sum for overhead charges and profits, this fixed sum being 20% on the estimated direct costs and 10% on the estimated-direct-costs-plus-20%.

Munitions

THE maximum profit usually considered by the British Ministry of Munitions to be reasonable for a contractor is 10% of wages, materials and expenses, and 2% for supervision of any subcontractors. As the demand for munitions has exceeded the supply, competitive bidding in this field has practically ceased. The Ministry of Munitions has regulated profits by the following means, the variety of which demonstrates a desire for adaptability:

1. *Fixed prices* based upon investigation of actual costs. This has been found to be the most satisfactory method, with prices based on consideration of current and earlier charges.

2. *Fixed prices* based upon estimates of costs framed by engineers and accountants.

3. *Provisional prices* revised and adjusted before or after completion of the work in the light of cost of production.

4. *Actual cost plus a fixed percentage of profit.* This method is used only in special cases.

5. *Actual cost plus a fixed fee or a fixed amount of profit per unit.*

6. *Profit-sharing* or cooperative contracts in which the savings below "standard" prices are shared with the government.

7. *Control of industries* and fixing of maximum prices by Order in Council. Such prices have been fixed for all the most important materials, and are based on cost of production.

8. *Requisition of output*, with prices fixed by the courts. This power has been used only once or twice.

9. *Special prices* for costly materials, with the profits calculated on the work done. This method is usually possible only when materials are supplied by the government.

10. *Safety valve clause*, which provides for acceptance of a low price fixed by the Ministry of Munitions with a promise of a supplement up to an agreed limit if investigations show that an increase is necessary to make possible a reasonable profit.

11. *Cost variation clause*, which provides for a reduction in price in consideration of an undertaking by the government to bear the risks of compulsory rises in wages and materials.

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Army Stores and Supplies

COMPETITIVE bidding, which is the normal method of purchase used by the British government, is still being used in this field when the demands are moderate as compared with the total capacity of an industry. Even when competitive bidding is used it is customary to provide that the prices are subject to later reduction if investigation of costs warrants.

In many British industries the demands are so heavy as to absorb the whole or the greater part of the capacity. Under these circumstances England has proceeded by requisitioning supplies, by obtaining control of the raw materials,—such as wool, leather, jute, flax, and hemp,—and by coordination of purchases. In coordinating purchases the British War Office buys many articles,—such as cloth, hosiery, lubricating oils, etc.,—for all other departments.

Naval Purchases

NAVAL purchases to a large extent still proceed upon a basis of competitive bidding. The British Admiralty has found that analysis of costs indicate that high profits are by no means universal and that in many cases the prices charged mean extremely moderate profits.

In building warships the British Admiralty uses contracts on a cost basis with a fixed profit and with fixed standing charges. On large subcontracts, e. g., for propelling machinery, no profit is allowed to the main contractor.

Bond Issues

THE first Liberty Loan, offered last June, was \$2,000,000,000. The second, offered in October, was \$3,800,000,000. The third Liberty Loan is to be offered on April 6.

For this new issue additional legislation is understood to be in contemplation. Its nature has not yet been made public. It may deal with a number of points. If the new bonds are to be attractive, and are to be offered at 4 per cent, either the discount of outstanding bonds in the market will have to be overcome by the proposed War Finance Corporation entering the market or special features must be placed in the new bonds. They may be issued for a short term, such as five years, or they may be made taxable only during the war and tax-free when peace has returned. In connection with intimations that some of the third Liberty Loan may be issued in terms of foreign money it has even been suggested that if a bond were issued as payable in the monies of all the countries where the dollar is now at a discount, people in these countries would gladly take them, as the United States would be in the position of betting against a good part of the world that its money would be at par at the end of a series of years; this might be a demonstration of real American spirit but it might have unpleasant consequences when the day of reckoning came, in the way of upsetting foreign exchange. Another suggestion is that non-transferable bonds should be issued to persons liable to income tax on condition that as to part of the tax there would be remission of an amount equal, say, to one-fourth of these bonds purchased; if the tax rate were increased, this would be a bond that might encourage economy almost to the point of compelling it. Although there have been official intimations that the rate of interest will not exceed 4%, the circumstances that Treasury certificates are now issued at 4½% and that we have begun to charge allied governments 5% make it possible there will be a change of mind about this point. If the

new bonds are wanting in novelty it will not be through a lack of suggestions brought to the attention of officials.

The new bond bill will probably give authority for all issues that may be needed to the end of 1917, and consequently may contain some figure like twelve billion dollars,—ten for ourselves to include the \$2,700,000,000 for which authority still exists under the law of last September and two billion for the Allies, for whom to the end of February we had established total credits of \$4,351,000,000.

Germany is putting out its eighth loan since September, 1914. Its loans have been issued regularly, in March and September. It has, of course, some methods entirely its own. The government announces the date three months in advance. It then arranges with the banks to allow interest at 4½% on deposits which are "ear-marked" for the loan. It also puts out anticipatory treasury certificates through the Reichsbank, letting that institution realize a profit on their distribution and making a preferential rate of interest for purchasers who get them to pay in on the loan.

Bond issues cause a certain amount of credit inflation which has its influence in raising prices, as Germany is now very well aware. Last December it was estimated that increasing prices may now cause an added expense to the British government of \$650,000,000 a year. With this in mind a committee of the House of Commons urged that the British government should strive to finance war by using existing purchasing power,—i. e., by prevailing upon the population to limit its expenditures and lend the saved purchasing power to the government,—rather than by creating new purchasing power. If this principle could be adopted, it is argued, profits could be limited and prevention of rise in wages, except according to a demonstrated advance in cost of living, could be attained.

New Taxation

NEW taxation is another subject which has not yet taken definite form in Congress but is under consideration. First attention will probably be given to revision of the definitions and the administrative portions of the laws of October, 1917, and September, 1916. Proposals for delay in payments of the taxes for 1917 beyond June 15, 1918, are also before committees of Congress; generally these suggestions would allow payments to be spread over the period between July and December, 1918, with interest at 3 per cent.

How much new taxation there will be, and upon what it will fall, are questions that may not be decided for some time. In the discussion, of course, the revenues produced by existing taxes will be cited. They will apparently amount to something like \$3,600,000,000 in the twelve months that end in June. If postal revenues are included they will approach closely to \$4,000,000,000. Customs duties will bring in about \$140,000,000, or the least amount since 1894. Internal revenue taxes, according to an official estimate in January, will produce \$3,400,000,000, with the items roughly as follows:

Distilled spirits	\$316,772,500
Fermented liquor	125,000,000
Wines	10,400,000
Rectified spirits	3,750,000
Soft drinks	9,750,000
Cigars, cigarettes, and tobacco	150,150,000
Oleomargarine and adulterated butter, etc.	1,300,000
Special taxes, spirits, beer, oleomargarine, etc.	5,000,000
Capital stock tax	24,000,000
Brokers and other special taxes	3,000,000
Opium manufacturers	300,000
Offers in compromise	1,000,000
Transportation	109,532,000
Insurance	3,333,000
Excise taxes, automobiles, etc.	43,987,500
Admissions	33,333,000
Club dues	1,000,000

Stamp taxes and playing cards.....	21,642,000
Estate.....	69,750,000
Munitions.....	40,000,000
Excess profits.....	1,226,000,000
Corporation income tax.....	535,000,000
Individual income tax.....	666,000,000

Aliens and Hostile Acts

ALL of the bills which are coming forward do not by any means deal with bond issues, taxes, and other financial affairs. The stranger within our gates, particularly when he happens to be of military age, has become an object of solicitude, both on the part of Congress and of the State Department. Proposals of many kinds have been brought forward having for their object either the repatriation of such persons in order that they may complete their military service under their own flag, or to secure the cooperation of the United States for the reciprocal enforcement by treaty of military service laws against persons from friendly belligerent countries and of military age.

Our Armed Forces

LEGISLATION is making somewhat more flexible the law under which selective draft is used. For instance, we are about to follow England's example in providing legislation under which men with the armed forces may be returned temporarily to their civilian employments, when their services are critically needed. Under a bill which has passed both Houses, men may be furloughed, upon their own voluntary application, not only for agriculture but for any civil occupation or pursuit. In England a special office has been created to deal with questions of this sort; through this office manufacturers usually apply for the temporary services of their former employees. Authorities have granted but a small part of the requests. When they act favorably there remains, of course, a question of the men's personal inclination.

Control of Supplies

POWER to enforce conservation of food-stuffs and of materials used in their preparation would be conferred upon the President in a bill which was placed before the House on February 23. The President would proceed by proclamation, his decisions to be effective five days after they are so announced.

Rationing would be directly possible under this bill only for public eating places, with which England began, first by limiting the number of courses to each meal and later by designating the amount of each kind of food that could be allowed for each person served. At the same time, by control over manufacturers the use of food and feed materials, and of other necessary articles, could be limited. For example, regulation might extend to the amount of sugar used in making sweet drinks and candy, sugar might be kept from tanners, flour might not be utilized in manufacture of paste, tin might be refused for boxes to contain tobacco, arsenic might be forbidden to glass-makers, and sisal might be reserved entirely for binder twine.

Distribution of food by manufacturers and dealers would also be subject to regulation. The language of the bill would permit designation of the amount of particular foods that a dealer might distribute in a locality, thus in effect authorizing compulsory rationing, although there is an express statement that there would be no regulation of the use of food actually in the possession of individuals.

On March 2 the Senate received from its Military Affairs Committee a proposal that the government be authorized to commandeer standing or fallen timber, logs or lumber for merchant ships, airplanes, or any other use of the Army and Navy. Under this bill the

government could enter forest reserves as well as privately-owned timber lands, and in order to utilize timber and logs it could commandeer saw mills and other necessary manufacturing equipment. With any mill the government would have, however, to leave enough logs to insure its continued operation. Compensation would be fixed by the President, with an opportunity for an owner to appeal to the courts.

Over the lumbering business generally the President could exercise control in order to enforce conservation. So far as necessary to insure adequate supplies for the Army, Navy, and Emergency Fleet Corporation, he could prescribe the manner for conducting all logging and lumbering operations, indicate the length of logs that are to be cut, and the dimensions of lumber products turned out by sawmills.

This bill has attracted so much attention from lumber men that it was subsequently withdrawn by the committee in order that hearings might be held on March 13.

Other Legislation

THERE are many other pieces of legislation that are advancing toward enactment. The Webb-Pomerene bill for cooperation in foreign trade, after passing both Houses, remains with the conferees who have had several meetings. A difficulty about insurance for soldiers and sailors is being cleared away, by permitting third persons,—i. e., other than the man himself,—to apply for insurance on behalf of an appropriate beneficiary. The bill which is intended to protect the property rights of persons with the armed forces became law on March 8. The special committee of the House on Water Powers has got to the point of opening hearings. There are pending a goodly number of amendments to the law regarding national banks.

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